

00:00:00.160 --> 00:00:01.920 Funding for Yale Cancer Answers  
NOTE Confidence: 0.93920827

00:00:01.920 --> 00:00:03.679 is provided by Smilow Cancer  
NOTE Confidence: 0.93920827

00:00:03.679 --> 00:00:04.180 Hospital.  
NOTE Confidence: 0.9421493

00:00:06.160 --> 00:00:08.080 Welcome to Yale Cancer Answers  
NOTE Confidence: 0.9421493

00:00:08.080 --> 00:00:09.039 with the director of the  
NOTE Confidence: 0.9421493

00:00:09.039 --> 00:00:10.800 Yale Cancer Center, Doctor Eric Winer.  
00:00:11.840 --> 00:00:14.054 Yale Cancer Answers features conversations  
NOTE Confidence: 0.9935036

00:00:14.195 --> 00:00:16.114 with oncologists and specialists who  
NOTE Confidence: 0.9935036

00:00:16.114 --> 00:00:17.075 are on the forefront of  
NOTE Confidence: 0.9935036

00:00:17.075 --> 00:00:18.454 the battle to fight cancer.  
NOTE Confidence: 0.9797093

00:00:19.074 --> 00:00:20.375 This week, it's a conversation  
NOTE Confidence: 0.9797093

00:00:20.435 --> 00:00:21.575 about some of the decisions  
NOTE Confidence: 0.9797093

00:00:21.715 --> 00:00:22.914 patients are faced with in  
NOTE Confidence: 0.9797093

00:00:22.914 --> 00:00:24.195 the treatment of breast cancer  
NOTE Confidence: 0.9797093

00:00:24.195 --> 00:00:25.654 with doctor Sarah Schellhorn.  
NOTE Confidence: 0.9815641

00:00:26.160 --> 00:00:27.840 Doctor Schellhorn is an associate  
NOTE Confidence: 0.9815641

00:00:27.840 --> 00:00:29.440 professor of medicine and medical

NOTE Confidence: 0.9815641

00:00:29.440 --> 00:00:30.880 oncology at the Yale School

NOTE Confidence: 0.9815641

00:00:30.880 --> 00:00:31.540 of Medicine.

NOTE Confidence: 0.89604074

00:00:31.920 --> 00:00:33.060 Here's doctor Winer.

NOTE Confidence: 0.97616285

00:00:33.920 --> 00:00:35.059 I know that

NOTE Confidence: 0.9923494

00:00:36.080 --> 00:00:37.920 over the course of the

NOTE Confidence: 0.9923494

00:00:37.920 --> 00:00:39.920 past decade plus, you have

NOTE Confidence: 0.9923494

00:00:39.920 --> 00:00:40.935 taken care of

NOTE Confidence: 0.9996923

00:00:41.495 --> 00:00:41.995 countless

NOTE Confidence: 0.96036947

00:00:42.935 --> 00:00:44.635 women with breast cancer.

NOTE Confidence: 0.94775057

00:00:46.935 --> 00:00:48.215 And some of those are

NOTE Confidence: 0.94775057

00:00:48.215 --> 00:00:48.955 young women.

NOTE Confidence: 0.99117243

00:00:49.655 --> 00:00:51.595 As people know, breast cancer

NOTE Confidence: 0.99117243

00:00:51.655 --> 00:00:53.495 affects women of all ages.

NOTE Confidence: 0.99117243

00:00:53.495 --> 00:00:55.035 It becomes more common

NOTE Confidence: 0.98253256

00:00:55.340 --> 00:00:56.940 as women grow older, but

NOTE Confidence: 0.98253256  
00:00:56.940 --> 00:00:57.440 it  
NOTE Confidence: 0.99598753  
00:00:57.980 --> 00:01:00.239 is a cancer that's pretty  
NOTE Confidence: 0.99598753  
00:01:00.379 --> 00:01:02.399 common in younger women too.  
NOTE Confidence: 0.99161637  
00:01:02.780 --> 00:01:04.720 And so issues about fertility  
NOTE Confidence: 0.99032795  
00:01:05.500 --> 00:01:06.240 come up.  
NOTE Confidence: 0.98976547  
00:01:06.540 --> 00:01:07.520 They sure do.  
NOTE Confidence: 0.9607334  
00:01:07.899 --> 00:01:08.399 And,  
NOTE Confidence: 0.99878407  
00:01:08.939 --> 00:01:10.575 maybe you could just, you  
NOTE Confidence: 0.99878407  
00:01:10.575 --> 00:01:11.855 know, start with a few  
NOTE Confidence: 0.99878407  
00:01:11.855 --> 00:01:12.355 thoughts  
NOTE Confidence: 0.99971324  
00:01:12.895 --> 00:01:13.395 about  
NOTE Confidence: 0.9994057  
00:01:13.855 --> 00:01:15.395 how you approach those conversations  
NOTE Confidence: 0.9899188  
00:01:16.015 --> 00:01:16.755 with patients.  
NOTE Confidence: 0.99957854  
00:01:18.495 --> 00:01:19.855 It's always a challenge  
NOTE Confidence: 0.97129136  
00:01:19.855 --> 00:01:21.055 when you're meeting a patient  
NOTE Confidence: 0.97129136

00:01:21.055 --> 00:01:22.255 for the first time and  
00:01:24.209 --> 00:01:25.670 they've been given this  
NOTE Confidence: 0.9729942  
00:01:26.130 --> 00:01:27.890 new diagnosis of breast cancer,  
NOTE Confidence: 0.9729942  
00:01:27.890 --> 00:01:28.850 and there are lots of  
NOTE Confidence: 0.9729942  
00:01:28.850 --> 00:01:30.209 things that have to be  
NOTE Confidence: 0.9729942  
00:01:30.209 --> 00:01:32.050 talked about regarding the new  
NOTE Confidence: 0.9729942  
00:01:32.050 --> 00:01:34.370 cancer, regarding the treatment, regarding  
NOTE Confidence: 0.9729942  
00:01:34.370 --> 00:01:35.810 all the options. You've got  
NOTE Confidence: 0.9729942  
00:01:35.810 --> 00:01:38.145 surgical options and medication options  
NOTE Confidence: 0.9238355  
00:01:38.784 --> 00:01:40.784 radiation options, and it  
NOTE Confidence: 0.9238355  
00:01:40.784 --> 00:01:42.325 can all be overwhelming.  
NOTE Confidence: 0.99558705  
00:01:44.145 --> 00:01:45.744 But it's really important to  
NOTE Confidence: 0.99558705  
00:01:45.744 --> 00:01:46.244 remember  
NOTE Confidence: 0.92961586  
00:01:47.424 --> 00:01:49.045 that young women in particular,  
NOTE Confidence: 0.9983198  
00:01:50.225 --> 00:01:51.825 may not have completed their  
NOTE Confidence: 0.9983198  
00:01:51.825 --> 00:01:53.765 families. They may not have  
NOTE Confidence: 0.99918544

00:01:56.120 --> 00:01:57.560 had children or as many  
NOTE Confidence: 0.99918544

00:01:57.560 --> 00:01:58.860 children as they would want.  
NOTE Confidence: 0.9998531

00:01:59.320 --> 00:02:00.300 They may have  
NOTE Confidence: 0.9790995

00:02:00.680 --> 00:02:01.800 plans, and they may have  
NOTE Confidence: 0.9790995

00:02:01.800 --> 00:02:03.260 been putting things off for  
NOTE Confidence: 0.9790995

00:02:03.320 --> 00:02:05.240 career or other reasons.  
NOTE Confidence: 0.9790995

00:02:05.240 --> 00:02:06.360 And those are NOTE Confidence: 0.9790995

00:02:06.360 --> 00:02:07.500 critical lifestyle  
NOTE Confidence: 0.9928405

00:02:08.025 --> 00:02:08.525 pieces  
NOTE Confidence: 0.9979598

00:02:09.145 --> 00:02:10.445 that we have to consider  
NOTE Confidence: 0.9979598

00:02:10.505 --> 00:02:12.185 in the treatment of  
NOTE Confidence: 0.9979598

00:02:12.185 --> 00:02:13.245 breast cancer. So  
NOTE Confidence: 0.8782158

00:02:13.625 --> 00:02:14.585 when I see a new  
NOTE Confidence: 0.8782158

00:02:14.585 --> 00:02:15.085 patient  
NOTE Confidence: 0.91892594

00:02:15.625 --> 00:02:16.825 that I have a little  
NOTE Confidence: 0.91892594

00:02:16.825 --> 00:02:18.044 bit of a mental checklist,  
NOTE Confidence: 0.9504566

00:02:19.385 --> 00:02:20.905 that I go through  
NOTE Confidence: 0.9504566

00:02:20.905 --> 00:02:21.405 that's  
NOTE Confidence: 0.96814746

00:02:21.960 --> 00:02:23.480 certainly talk about the cancer,  
NOTE Confidence: 0.96814746

00:02:23.480 --> 00:02:25.000 talk about the reasons for  
NOTE Confidence: 0.96814746

00:02:25.000 --> 00:02:26.600 various treatments, and the reasons  
NOTE Confidence: 0.96814746

00:02:26.600 --> 00:02:27.980 why things are being recommended.  
NOTE Confidence: 0.97206575

00:02:28.600 --> 00:02:29.880 But we also wanna make  
NOTE Confidence: 0.97206575

00:02:29.880 --> 00:02:31.080 sure that we're taking into  
NOTE Confidence: 0.97206575

00:02:31.080 --> 00:02:31.580 account,  
NOTE Confidence: 0.99696666

00:02:32.200 --> 00:02:33.800 is your family complete? Have  
NOTE Confidence: 0.99696666

00:02:33.800 --> 00:02:35.145 you ever thought about having  
NOTE Confidence: 0.99696666

00:02:35.305 --> 00:02:36.345 children? Because a lot of  
NOTE Confidence: 0.99696666

00:02:36.345 --> 00:02:37.385 the treatments that we use  
NOTE Confidence: 0.99696666

00:02:37.385 --> 00:02:38.345 in the treatment of breast  
NOTE Confidence: 0.99696666

00:02:38.345 --> 00:02:38.845 cancer  
NOTE Confidence: 0.9982735

00:02:39.465 --> 00:02:40.205 can affect

NOTE Confidence: 0.99806315

00:02:40.825 --> 00:02:42.205 someone's future fertility.

NOTE Confidence: 0.9997857

00:02:43.305 --> 00:02:45.305 They may prevent someone from

NOTE Confidence: 0.9997857

00:02:45.305 --> 00:02:46.345 being able to carry a

NOTE Confidence: 0.9997857

00:02:46.345 --> 00:02:47.245 healthy pregnancy

NOTE Confidence: 0.9658937

00:02:47.600 --> 00:02:48.720 if they were to become

NOTE Confidence: 0.9658937

00:02:48.720 --> 00:02:50.580 pregnant while on these medications.

NOTE Confidence: 0.9658937

00:02:50.720 --> 00:02:52.660 So these are critical conversations

NOTE Confidence: 0.9658937

00:02:52.720 --> 00:02:53.700 that have to happen.

NOTE Confidence: 0.9709918

00:02:58.639 --> 00:03:00.419 And they can effect fertility in different ways.

NOTE Confidence: 0.9617874

00:03:00.845 --> 00:03:02.305 Chemotherapy, for example.

NOTE Confidence: 0.9956579

00:03:03.245 --> 00:03:03.745 Chemotherapy,

NOTE Confidence: 0.9781617

00:03:04.845 --> 00:03:05.965 as I think many of

NOTE Confidence: 0.9781617

00:03:05.965 --> 00:03:07.264 our listeners know,

NOTE Confidence: 0.99963856

00:03:07.644 --> 00:03:08.144 can

NOTE Confidence: 0.9974474

00:03:08.924 --> 00:03:10.944 put a woman into menopause.

NOTE Confidence: 0.9988107

00:03:11.325 --> 00:03:11.825 Yes.  
NOTE Confidence: 0.9956689

00:03:12.204 --> 00:03:12.540 But  
NOTE Confidence: 0.97796005

00:03:13.019 --> 00:03:14.719 that's not always the case,  
NOTE Confidence: 0.97796005

00:03:14.780 --> 00:03:16.299 and it's very much age  
NOTE Confidence: 0.97796005

00:03:16.299 --> 00:03:16.799 related.  
NOTE Confidence: 0.99685395

00:03:17.180 --> 00:03:17.680 Yes.  
NOTE Confidence: 0.9833513

00:03:19.099 --> 00:03:20.219 Talk about that a little  
NOTE Confidence: 0.9833513

00:03:20.219 --> 00:03:21.180 bit. I mean, if  
NOTE Confidence: 0.9833513

00:03:21.340 --> 00:03:22.540 you're a twenty five  
NOTE Confidence: 0.9833513

00:03:22.540 --> 00:03:23.579 year old, are you gonna  
NOTE Confidence: 0.9833513

00:03:23.579 --> 00:03:25.294 go into menopause with chemotherapy?  
NOTE Confidence: 0.98015124

00:03:25.754 --> 00:03:26.715 You may go into  
NOTE Confidence: 0.98015124

00:03:26.715 --> 00:03:28.075 a temporary menopause, and you  
NOTE Confidence: 0.98015124

00:03:28.075 --> 00:03:29.355 may have hot flashes and  
NOTE Confidence: 0.98015124

00:03:29.355 --> 00:03:30.635 be kind of uncomfortable from  
NOTE Confidence: 0.98015124

00:03:30.635 --> 00:03:32.254 a menopausal standpoint



NOTE Confidence: 0.99250543  
00:03:32.555 --> 00:03:33.594 for a short period of  
NOTE Confidence: 0.99250543  
00:03:33.594 --> 00:03:35.534 time. But in all likelihood,  
NOTE Confidence: 0.99662346  
00:03:36.715 --> 00:03:37.754 a twenty five year old  
NOTE Confidence: 0.99662346  
00:03:37.754 --> 00:03:39.830 has very robust ovaries that  
NOTE Confidence: 0.99662346  
00:03:39.830 --> 00:03:40.870 are gonna kick it back  
NOTE Confidence: 0.99662346  
00:03:40.870 --> 00:03:41.610 into gear  
NOTE Confidence: 0.9990718  
00:03:42.069 --> 00:03:43.510 within a few months from  
NOTE Confidence: 0.9990718  
00:03:43.510 --> 00:03:44.490 completing chemotherapy.  
NOTE Confidence: 0.99588895  
00:03:45.910 --> 00:03:47.270 The older a woman is  
NOTE Confidence: 0.99588895  
00:03:47.270 --> 00:03:48.970 and the closer to natural  
NOTE Confidence: 0.99588895  
00:03:49.030 --> 00:03:49.530 menopause,  
NOTE Confidence: 0.99966  
00:03:49.990 --> 00:03:51.130 the less likely  
NOTE Confidence: 0.9881586  
00:03:51.944 --> 00:03:53.885 that they will regain fertility.  
NOTE Confidence: 0.9906687  
00:03:54.584 --> 00:03:55.705 But a twenty five year  
NOTE Confidence: 0.9906687  
00:03:55.705 --> 00:03:56.985 old, a thirty year old,  
NOTE Confidence: 0.9906687

00:03:56.985 --> 00:03:58.985 very likely to be  
NOTE Confidence: 0.9906687

00:03:58.985 --> 00:03:59.724 able to  
NOTE Confidence: 0.9724903

00:04:01.545 --> 00:04:03.705 have menstrual  
NOTE Confidence: 0.9724903

00:04:03.705 --> 00:04:05.465 cycles again, may be able  
NOTE Confidence: 0.9724903

00:04:05.465 --> 00:04:07.010 to become pregnant. And there  
NOTE Confidence: 0.9724903

00:04:07.010 --> 00:04:07.890 are even things that we  
NOTE Confidence: 0.9724903

00:04:07.890 --> 00:04:09.270 can do during chemotherapy  
NOTE Confidence: 0.9993021

00:04:09.650 --> 00:04:11.270 that can help preserve fertility.  
NOTE Confidence: 0.9953731

00:04:11.970 --> 00:04:13.430 And what are those things?  
00:04:16.370 --> 00:04:17.250 I feel like you might  
NOTE Confidence: 0.9403948

00:04:17.250 --> 00:04:18.050 know the answer to this  
NOTE Confidence: 0.9403948

00:04:18.050 --> 00:04:19.990 question, but  
NOTE Confidence: 0.9403948

00:04:20.214 --> 00:04:21.755 you can actually  
NOTE Confidence: 0.9403948

00:04:21.815 --> 00:04:22.634 use medications  
NOTE Confidence: 0.9100071

00:04:23.735 --> 00:04:26.315 called GnRH agonists. They're  
NOTE Confidence: 0.9100071

00:04:26.455 --> 00:04:28.315 shots, injections that  
NOTE Confidence: 0.9855412

00:04:28.935 --> 00:04:30.615 effectively put the ovaries to  
NOTE Confidence: 0.9855412

00:04:30.615 --> 00:04:32.055 sleep, kind of put them  
NOTE Confidence: 0.9855412

00:04:32.055 --> 00:04:33.035 into a dormant  
NOTE Confidence: 0.9881218

00:04:33.710 --> 00:04:35.650 status so that the chemotherapy  
NOTE Confidence: 0.9881218

00:04:35.870 --> 00:04:37.330 doesn't affect them as much.  
NOTE Confidence: 0.9875723

00:04:38.190 --> 00:04:38.690 And  
NOTE Confidence: 0.9954951

00:04:39.070 --> 00:04:41.150 studies have shown that women  
NOTE Confidence: 0.9954951

00:04:41.150 --> 00:04:42.370 who receive  
NOTE Confidence: 0.95626754

00:04:43.470 --> 00:04:45.490 these additional treatments during chemotherapy  
NOTE Confidence: 0.9978448

00:04:46.464 --> 00:04:47.585 are more likely to go  
NOTE Confidence: 0.9978448

00:04:47.585 --> 00:04:49.125 on and carry healthy pregnancies  
NOTE Confidence: 0.99640787

00:04:50.545 --> 00:04:51.665 in the future.  
NOTE Confidence: 0.99640787

00:04:51.665 --> 00:04:52.625 So we use those a lot  
NOTE Confidence: 0.99640787

00:04:52.625 --> 00:04:54.145 in people who desire future  
NOTE Confidence: 0.99640787

00:04:54.145 --> 00:04:54.645 fertility.  
NOTE Confidence: 0.99628705

00:04:55.105 --> 00:04:56.785 So that's one option

NOTE Confidence: 0.99628705

00:04:56.785 --> 00:04:58.325 during chemotherapy itself.

00:05:01.600 --> 00:05:02.980 But you also have to remember

NOTE Confidence: 0.98502254

00:05:03.120 --> 00:05:03.940 when someone is

00:05:05.120 --> 00:05:07.279 undergoing chemotherapy and their

NOTE Confidence: 0.96429896

00:05:07.279 --> 00:05:08.800 ovaries are a certain age,

NOTE Confidence: 0.96429896

00:05:08.800 --> 00:05:10.720 whatever that age is,

00:05:12.014 --> 00:05:13.375 those ovaries are not getting

NOTE Confidence: 0.9865338

00:05:13.375 --> 00:05:15.055 any younger, and any eggs

NOTE Confidence: 0.9865338

00:05:15.055 --> 00:05:16.255 that are contained in those

NOTE Confidence: 0.9865338

00:05:16.255 --> 00:05:17.955 ovaries aren't getting any younger.

NOTE Confidence: 0.9954567

00:05:18.255 --> 00:05:19.695 And so even when we

NOTE Confidence: 0.9954567

00:05:19.695 --> 00:05:20.514 try to

NOTE Confidence: 0.9993744

00:05:20.815 --> 00:05:23.134 preserve someone's fertility by using

NOTE Confidence: 0.9993744

00:05:23.134 --> 00:05:23.955 these injections,

NOTE Confidence: 0.99867934

00:05:24.950 --> 00:05:26.090 we still may advise

NOTE Confidence: 0.99379164

00:05:26.550 --> 00:05:28.870 them to preserve eggs or

NOTE Confidence: 0.99379164

00:05:28.870 --> 00:05:29.990 embryos if they're in a

NOTE Confidence: 0.99379164  
00:05:29.990 --> 00:05:30.970 committed relationship  
NOTE Confidence: 0.9763455  
00:05:33.750 --> 00:05:35.510 to enhance the options of  
NOTE Confidence: 0.9763455  
00:05:35.510 --> 00:05:37.610 having a healthy baby, healthy  
NOTE Confidence: 0.9763455  
00:05:37.750 --> 00:05:38.250 pregnancy  
NOTE Confidence: 0.97525215  
00:05:38.790 --> 00:05:40.005 down the line. Because  
NOTE Confidence: 0.97525215  
00:05:40.085 --> 00:05:41.445 the older an ovary gets,  
NOTE Confidence: 0.97525215  
00:05:41.445 --> 00:05:42.745 the older the egg gets,  
NOTE Confidence: 0.97148025  
00:05:43.285 --> 00:05:45.225 the more chances that  
NOTE Confidence: 0.9993095  
00:05:46.325 --> 00:05:48.245 genetically, a baby may have  
NOTE Confidence: 0.9993095  
00:05:48.245 --> 00:05:48.985 more problems.  
NOTE Confidence: 0.94847566  
00:05:50.085 --> 00:05:51.365 Well in  
NOTE Confidence: 0.97155184  
00:05:52.180 --> 00:05:54.339 my former institution before I  
NOTE Confidence: 0.97155184  
00:05:54.339 --> 00:05:55.300 came to Yale a few  
NOTE Confidence: 0.97155184  
00:05:55.300 --> 00:05:56.039 years ago,  
NOTE Confidence: 0.9994044  
00:05:57.139 --> 00:05:59.000 we had started a program for  
00:06:00.419 --> 00:06:02.120 young women with breast cancer,

NOTE Confidence: 0.95498323

00:06:03.379 --> 00:06:05.479 something that we're actually starting

NOTE Confidence: 0.95498323

00:06:05.539 --> 00:06:06.945 at Smilow,

NOTE Confidence: 0.9861644

00:06:07.485 --> 00:06:08.685 for not just young women

NOTE Confidence: 0.9861644

00:06:08.685 --> 00:06:09.964 with breast cancer, but young

NOTE Confidence: 0.9861644

00:06:09.964 --> 00:06:11.665 people with cancer in general.

NOTE Confidence: 0.9790175

00:06:12.285 --> 00:06:13.565 But the reason I bring

NOTE Confidence: 0.9790175

00:06:13.565 --> 00:06:14.785 this up is that

NOTE Confidence: 0.999463

00:06:15.404 --> 00:06:15.904 initially,

NOTE Confidence: 0.99976027

00:06:16.205 --> 00:06:17.025 we set

NOTE Confidence: 0.9944474

00:06:17.325 --> 00:06:19.325 the cut point for age

NOTE Confidence: 0.9944474

00:06:19.325 --> 00:06:20.625 at forty two.

NOTE Confidence: 0.9623588

00:06:21.930 --> 00:06:23.450 It eventually snuck up a

NOTE Confidence: 0.9623588

00:06:23.450 --> 00:06:24.490 little bit as the person

NOTE Confidence: 0.9623588

00:06:24.490 --> 00:06:26.029 who was directing that program

NOTE Confidence: 0.9323354

00:06:26.890 --> 00:06:28.510 also got a little older.

NOTE Confidence: 0.9540994

00:06:28.970 --> 00:06:30.430 But the reason we picked  
NOTE Confidence: 0.9540994

00:06:30.570 --> 00:06:32.430 forty two is that  
NOTE Confidence: 0.99722755

00:06:33.050 --> 00:06:35.025 that was probably an  
NOTE Confidence: 0.99722755

00:06:35.025 --> 00:06:36.145 age where there aren't a  
NOTE Confidence: 0.99722755

00:06:36.145 --> 00:06:37.505 lot of people who are  
NOTE Confidence: 0.99722755

00:06:37.505 --> 00:06:38.005 still  
NOTE Confidence: 0.9928878

00:06:38.384 --> 00:06:40.625 thinking about becoming pregnant after  
NOTE Confidence: 0.9928878

00:06:40.625 --> 00:06:41.365 that age.  
NOTE Confidence: 0.9974751

00:06:41.824 --> 00:06:43.185 And while there may be  
NOTE Confidence: 0.9974751

00:06:43.185 --> 00:06:44.324 a few,  
NOTE Confidence: 0.9786482

00:06:45.025 --> 00:06:46.384 our options  
NOTE Confidence: 0.9786482

00:06:46.384 --> 00:06:47.764 are much more limited.  
NOTE Confidence: 0.87112916

00:06:48.305 --> 00:06:48.705 But,  
NOTE Confidence: 0.9947912

00:06:49.980 --> 00:06:51.040 the other complicating  
NOTE Confidence: 0.9975174

00:06:51.900 --> 00:06:53.980 feature is that we also  
NOTE Confidence: 0.9975174

00:06:53.980 --> 00:06:54.480 sometimes

NOTE Confidence: 0.9980615  
00:06:54.860 --> 00:06:55.360 suppress  
NOTE Confidence: 0.9995253  
00:06:56.060 --> 00:06:57.760 the function of ovaries  
NOTE Confidence: 0.9994144  
00:06:58.220 --> 00:06:59.580 as part of treatment for  
NOTE Confidence: 0.9994144  
00:06:59.580 --> 00:07:00.320 breast cancer.  
NOTE Confidence: 0.99811494  
00:07:00.779 --> 00:07:02.480 Or we use medications  
NOTE Confidence: 0.99320257  
00:07:03.180 --> 00:07:04.000 that are  
NOTE Confidence: 0.98908675  
00:07:05.005 --> 00:07:05.665 contraindicated.  
NOTE Confidence: 0.99248785  
00:07:06.045 --> 00:07:07.325 They can't be given during  
NOTE Confidence: 0.99248785  
00:07:07.325 --> 00:07:08.925 pregnancy because they cause fetal  
NOTE Confidence: 0.99248785  
00:07:08.925 --> 00:07:09.425 abnormalities.  
NOTE Confidence: 0.9040846  
00:07:10.605 --> 00:07:11.885 And these are  
NOTE Confidence: 0.9040846  
00:07:11.885 --> 00:07:14.525 the hormone based treatments or  
NOTE Confidence: 0.9040846  
00:07:14.525 --> 00:07:16.545 probably more appropriately anti hormone,  
NOTE Confidence: 0.9040846  
00:07:16.605 --> 00:07:17.105 antiestrogens.  
00:07:21.010 --> 00:07:23.110 So depending on whatever clinical circumstance,  
NOTE Confidence: 0.9768767  
00:07:23.250 --> 00:07:24.610 we might put someone into



NOTE Confidence: 0.9768767  
00:07:24.610 --> 00:07:25.110 menopause,  
NOTE Confidence: 0.93041956  
00:07:26.050 --> 00:07:27.330 in which case they can't  
NOTE Confidence: 0.93041956  
00:07:27.330 --> 00:07:28.710 become pregnant naturally,  
NOTE Confidence: 0.9836409  
00:07:29.410 --> 00:07:30.770 if they're in menopause. Their  
NOTE Confidence: 0.9836409  
00:07:30.770 --> 00:07:32.070 ovaries are not functioning.  
NOTE Confidence: 0.98980814  
00:07:33.005 --> 00:07:33.965 Or we use a drug  
NOTE Confidence: 0.98980814  
00:07:33.965 --> 00:07:34.785 called tamoxifen,  
NOTE Confidence: 0.98345345  
00:07:36.285 --> 00:07:37.805 which cannot be given during  
NOTE Confidence: 0.98345345  
00:07:37.805 --> 00:07:38.305 pregnancy.  
NOTE Confidence: 0.9909213  
00:07:39.005 --> 00:07:39.965 And these are given for  
NOTE Confidence: 0.9909213  
00:07:39.965 --> 00:07:41.165 a long time. They're given  
NOTE Confidence: 0.9909213  
00:07:41.165 --> 00:07:43.425 for at least five years  
NOTE Confidence: 0.9909213  
00:07:43.565 --> 00:07:44.625 in many cases,  
NOTE Confidence: 0.960233  
00:07:45.645 --> 00:07:46.945 assuming they're well tolerated.  
NOTE Confidence: 0.98159164  
00:07:48.150 --> 00:07:50.070 And that's five years of  
NOTE Confidence: 0.98159164

00:07:50.070 --> 00:07:50.570 time  
NOTE Confidence: 0.969539

00:07:51.190 --> 00:07:53.190 where ovaries are also getting  
NOTE Confidence: 0.969539

00:07:53.190 --> 00:07:54.310 older and eggs that are  
NOTE Confidence: 0.969539

00:07:54.310 --> 00:07:55.190 in the ovaries are getting  
NOTE Confidence: 0.969539

00:07:55.190 --> 00:07:56.490 older. So it may become  
NOTE Confidence: 0.99931103

00:07:57.030 --> 00:07:58.170 just because of  
NOTE Confidence: 0.99364346

00:07:58.790 --> 00:08:00.390 normal, natural  
NOTE Confidence: 0.99364346

00:08:00.390 --> 00:08:01.930 history of a woman's fertility,  
NOTE Confidence: 0.99364346

00:08:01.990 --> 00:08:02.870 it may be harder to  
NOTE Confidence: 0.99364346

00:08:02.870 --> 00:08:04.365 become pregnant after five years  
NOTE Confidence: 0.99364346

00:08:04.365 --> 00:08:05.504 of endocrine therapy.  
NOTE Confidence: 0.9939769

00:08:06.125 --> 00:08:07.724 So I'm not  
NOTE Confidence: 0.9939769

00:08:07.724 --> 00:08:08.525 sure if this is where  
NOTE Confidence: 0.9939769

00:08:08.525 --> 00:08:09.965 you were pointing  
NOTE Confidence: 0.9939769

00:08:09.965 --> 00:08:11.504 our conversation, but  
NOTE Confidence: 0.94940615

00:08:11.884 --> 00:08:13.324 there's a

NOTE Confidence: 0.94940615  
00:08:13.324 --> 00:08:15.104 study called the positive study,  
NOTE Confidence: 0.98451406  
00:08:16.420 --> 00:08:18.100 designed, I think, primarily by  
NOTE Confidence: 0.98451406  
00:08:18.100 --> 00:08:19.640 people at your former institution,  
00:08:22.500 --> 00:08:24.760 that looked at discontinuing  
NOTE Confidence: 0.9797053  
00:08:25.300 --> 00:08:26.760 endocrine therapy, tamoxifen  
NOTE Confidence: 0.8026065  
00:08:27.140 --> 00:08:27.880 or others,  
NOTE Confidence: 0.9791711  
00:08:28.420 --> 00:08:30.120 earlier than the five years.  
NOTE Confidence: 0.9791711  
00:08:30.325 --> 00:08:31.445 So women had to be  
NOTE Confidence: 0.9791711  
00:08:31.445 --> 00:08:34.245 on that medication for  
NOTE Confidence: 0.9791711  
00:08:34.245 --> 00:08:35.845 at least eighteen months, but  
NOTE Confidence: 0.9791711  
00:08:35.845 --> 00:08:36.745 could be longer.  
NOTE Confidence: 0.9981626  
00:08:37.925 --> 00:08:39.445 And the medication was  
NOTE Confidence: 0.9981626  
00:08:39.445 --> 00:08:41.285 discontinued in an effort to  
NOTE Confidence: 0.9981626  
00:08:41.285 --> 00:08:42.425 have them achieve  
NOTE Confidence: 0.9561624  
00:08:42.725 --> 00:08:44.345 a normal pregnancy, either  
NOTE Confidence: 0.9558256  
00:08:45.059 --> 00:08:45.880 through natural

NOTE Confidence: 0.99604064

00:08:47.059 --> 00:08:48.520 means or through

NOTE Confidence: 0.9962294

00:08:49.140 --> 00:08:50.600 additional fertility treatments.

NOTE Confidence: 0.9787558

00:08:51.140 --> 00:08:52.900 And so far, the results

NOTE Confidence: 0.9787558

00:08:52.900 --> 00:08:54.100 from that study have been

NOTE Confidence: 0.9787558

00:08:54.100 --> 00:08:54.600 incredibly

NOTE Confidence: 0.9919596

00:08:56.420 --> 00:08:57.559 positive, incredibly

NOTE Confidence: 0.9997161

00:08:58.179 --> 00:08:58.679 optimistic

NOTE Confidence: 0.98188925

00:08:59.059 --> 00:09:00.195 that women can

NOTE Confidence: 0.99897736

00:09:01.075 --> 00:09:02.135 stop endocrine therapy,

NOTE Confidence: 0.9888291

00:09:02.995 --> 00:09:04.755 have a pregnancy, deliver a

NOTE Confidence: 0.9888291

00:09:04.755 --> 00:09:06.275 baby, even breastfeed for a

NOTE Confidence: 0.9888291

00:09:06.275 --> 00:09:07.955 little bit, and then go

NOTE Confidence: 0.9888291

00:09:07.955 --> 00:09:09.795 back on endocrine therapy with

NOTE Confidence: 0.9888291

00:09:09.795 --> 00:09:11.554 no detrimental effects to their

NOTE Confidence: 0.9888291

00:09:11.554 --> 00:09:13.410 ultimate outcome, although we're still

NOTE Confidence: 0.9888291

00:09:13.410 --> 00:09:14.929 waiting for long term  
NOTE Confidence: 0.9888291

00:09:14.929 --> 00:09:16.470 follow-up of this study.  
NOTE Confidence: 0.97562927

00:09:17.090 --> 00:09:18.290 And and, of course, we  
NOTE Confidence: 0.97562927

00:09:18.290 --> 00:09:20.550 couldn't do the ultimate study,  
NOTE Confidence: 0.97562927

00:09:20.610 --> 00:09:21.990 which would be to randomize  
NOTE Confidence: 0.97562927

00:09:22.210 --> 00:09:23.730 patients because it's pretty hard  
NOTE Confidence: 0.97562927

00:09:23.730 --> 00:09:24.230 to  
NOTE Confidence: 0.97036844

00:09:24.795 --> 00:09:27.135 randomize someone to get pregnant  
NOTE Confidence: 0.97036844

00:09:27.275 --> 00:09:28.475 or you don't get pregnant.  
NOTE Confidence: 0.97036844

00:09:28.475 --> 00:09:29.434 That's a tough thing to do.  
00:09:30.554 --> 00:09:31.995 That's not one  
NOTE Confidence: 0.97036844

00:09:31.995 --> 00:09:33.535 that can be done.  
NOTE Confidence: 0.9792903

00:09:34.315 --> 00:09:35.675 What was interesting about the  
NOTE Confidence: 0.9792903

00:09:35.675 --> 00:09:36.955 results from the study too  
NOTE Confidence: 0.9792903

00:09:36.955 --> 00:09:37.615 is that,  
NOTE Confidence: 0.9950102

00:09:39.350 --> 00:09:40.870 about three quarters of the  
NOTE Confidence: 0.9950102

00:09:40.870 --> 00:09:42.490 women, if I remember correctly,  
NOTE Confidence: 0.9950102

00:09:42.710 --> 00:09:43.210 actually  
NOTE Confidence: 0.99383783

00:09:43.990 --> 00:09:45.690 were able to become pregnant  
NOTE Confidence: 0.9697741

00:09:46.070 --> 00:09:48.390 and deliver a child,  
NOTE Confidence: 0.9697741

00:09:48.390 --> 00:09:50.010 which is a remarkably  
NOTE Confidence: 0.9627491

00:09:50.310 --> 00:09:51.990 high percentage.  
NOTE Confidence: 0.9627491

00:09:51.990 --> 00:09:53.295 It is, especially given that  
NOTE Confidence: 0.9676296

00:09:53.695 --> 00:09:54.735 a fair number of those  
NOTE Confidence: 0.9676296

00:09:54.735 --> 00:09:55.795 women got chemotherapy,  
NOTE Confidence: 0.9357858

00:09:57.135 --> 00:09:58.355 so really reassuring,  
NOTE Confidence: 0.9942595

00:09:59.295 --> 00:10:00.735 and I think opens a  
NOTE Confidence: 0.9942595

00:10:00.735 --> 00:10:01.475 lot of doors  
NOTE Confidence: 0.9558838

00:10:02.095 --> 00:10:03.615 that we previously would have  
NOTE Confidence: 0.9558838

00:10:03.615 --> 00:10:04.595 considered closed  
NOTE Confidence: 0.98659635

00:10:05.855 --> 00:10:07.615 for younger women with breast  
NOTE Confidence: 0.98659635

00:10:07.615 --> 00:10:08.115 cancer.

NOTE Confidence: 0.9866554

00:10:09.600 --> 00:10:11.040 It does seem that

NOTE Confidence: 0.92518055

00:10:11.520 --> 00:10:13.860 as complicated as this dance is around

00:10:16.000 --> 00:10:18.020 breast cancer treatment and pregnancy,

NOTE Confidence: 0.9994262

00:10:18.400 --> 00:10:19.920 that there's often a way

NOTE Confidence: 0.9994262

00:10:19.920 --> 00:10:20.580 to navigate

NOTE Confidence: 0.99825835

00:10:22.285 --> 00:10:24.144 a result that is gonna

NOTE Confidence: 0.99825835

00:10:24.205 --> 00:10:25.425 both be optimal

NOTE Confidence: 0.9850538

00:10:25.885 --> 00:10:27.005 in terms of treating the

NOTE Confidence: 0.9850538

00:10:27.005 --> 00:10:28.765 cancer and will also give

NOTE Confidence: 0.9850538

00:10:28.765 --> 00:10:30.365 somebody the chance to have

NOTE Confidence: 0.9850538

00:10:30.365 --> 00:10:31.485 a child if that's what

NOTE Confidence: 0.9850538

00:10:31.485 --> 00:10:33.265 they really wanna do.

NOTE Confidence: 0.9850538

00:10:33.325 --> 00:10:35.265 It's a careful conversation.

NOTE Confidence: 0.99776953

00:10:35.980 --> 00:10:37.360 It's a long conversation.

NOTE Confidence: 0.98957443

00:10:38.540 --> 00:10:39.500 It can be a really

NOTE Confidence: 0.98957443

00:10:39.500 --> 00:10:41.040 emotional and intense conversation,

NOTE Confidence: 0.9992506

00:10:42.620 --> 00:10:43.120 because

NOTE Confidence: 0.88275164

00:10:44.059 --> 00:10:44.559 pretty

NOTE Confidence: 0.9710121

00:10:45.020 --> 00:10:46.700 far reaching ramifications for a

NOTE Confidence: 0.9710121

00:10:46.700 --> 00:10:48.960 woman's future. But

NOTE Confidence: 0.9997297

00:10:50.035 --> 00:10:51.715 we are often able to

NOTE Confidence: 0.9997297

00:10:51.715 --> 00:10:52.215 navigate

NOTE Confidence: 0.9968631

00:10:53.554 --> 00:10:54.054 chemotherapy,

NOTE Confidence: 0.94943094

00:10:55.075 --> 00:10:57.175 fertility treatments prior to chemotherapy.

NOTE Confidence: 0.9912662

00:10:57.955 --> 00:10:59.155 And even when someone needs

NOTE Confidence: 0.9912662

00:10:59.155 --> 00:11:00.275 to be on endocrine therapy

NOTE Confidence: 0.9912662

00:11:00.275 --> 00:11:01.975 long term,

NOTE Confidence: 0.9970713

00:11:03.070 --> 00:11:04.270 getting a woman to a

NOTE Confidence: 0.9970713

00:11:04.270 --> 00:11:05.730 point where she can try

NOTE Confidence: 0.9970713

00:11:05.790 --> 00:11:06.529 to naturally

NOTE Confidence: 0.96644145

00:11:07.149 --> 00:11:08.990 have a child or

NOTE Confidence: 0.96644145



00:11:08.990 --> 00:11:10.589 with some medical help have  
NOTE Confidence: 0.96644145

00:11:10.589 --> 00:11:12.270 a child.  
NOTE Confidence: 0.96644145

00:11:12.270 --> 00:11:13.649 And for our listeners,  
NOTE Confidence: 0.9905104

00:11:14.750 --> 00:11:16.110 it is worth pointing out  
NOTE Confidence: 0.9905104

00:11:16.110 --> 00:11:18.395 that years ago, meaning twenty,  
NOTE Confidence: 0.9905104

00:11:18.395 --> 00:11:19.535 thirty years ago,  
NOTE Confidence: 0.9990772

00:11:19.995 --> 00:11:20.655 it was  
NOTE Confidence: 0.9993073

00:11:21.115 --> 00:11:23.535 widely assumed that getting pregnant  
NOTE Confidence: 0.9993073

00:11:23.595 --> 00:11:24.735 after breast cancer  
NOTE Confidence: 0.9897478

00:11:25.195 --> 00:11:26.875 was something that you always  
NOTE Confidence: 0.9897478

00:11:26.875 --> 00:11:28.395 wanted to avoid because the  
NOTE Confidence: 0.9897478

00:11:28.395 --> 00:11:30.495 pregnancy could stimulate a recurrence.  
NOTE Confidence: 0.9609516

00:11:31.275 --> 00:11:33.399 And that really doesn't seem  
NOTE Confidence: 0.9609516

00:11:33.399 --> 00:11:34.440 to be the case.  
NOTE Confidence: 0.9609516

00:11:34.440 --> 00:11:35.800 In the data we have  
00:11:38.120 --> 00:11:39.640 it has never really been shown. In fact, it  
NOTE Confidence: 0.9609516

00:11:39.640 --> 00:11:40.860 hasn't been shown.  
NOTE Confidence: 0.94936436

00:11:41.559 --> 00:11:43.080 That's right. So I think  
NOTE Confidence: 0.94936436

00:11:43.080 --> 00:11:44.440 we're in a  
NOTE Confidence: 0.94936436

00:11:44.440 --> 00:11:45.800 much better place. We  
NOTE Confidence: 0.94936436

00:11:45.800 --> 00:11:46.620 also now  
NOTE Confidence: 0.99086016

00:11:47.345 --> 00:11:49.285 can not only preserve embryos,  
NOTE Confidence: 0.99086016

00:11:49.505 --> 00:11:51.025 but if someone doesn't have  
NOTE Confidence: 0.99086016

00:11:51.025 --> 00:11:51.684 a partner,  
NOTE Confidence: 0.99973917

00:11:52.145 --> 00:11:53.525 we can save  
NOTE Confidence: 0.98037523

00:11:53.985 --> 00:11:56.225 eggs, eggs or pieces  
NOTE Confidence: 0.98037523

00:11:56.225 --> 00:11:57.985 of ovarian tissue, all kinds  
NOTE Confidence: 0.98037523

00:11:57.985 --> 00:11:59.025 of different things,  
NOTE Confidence: 0.9990227

00:12:00.059 --> 00:12:01.900 that fertility specialists have at  
NOTE Confidence: 0.9990227

00:12:01.900 --> 00:12:03.260 their fingertips to be able to help.  
00:12:05.900 --> 00:12:07.420 Again, nothing's a  
NOTE Confidence: 0.9429113

00:12:07.420 --> 00:12:09.020 hundred percent, but lots of  
NOTE Confidence: 0.9429113

00:12:09.020 --> 00:12:10.800 options that can be explored.

NOTE Confidence: 0.9567947

00:12:11.100 --> 00:12:11.900 And I think this

NOTE Confidence: 0.9567947

00:12:11.900 --> 00:12:13.179 is another example of the

NOTE Confidence: 0.9567947

00:12:13.179 --> 00:12:14.000 fact that

NOTE Confidence: 0.9986934

00:12:14.345 --> 00:12:15.485 you often need

NOTE Confidence: 0.99971265

00:12:16.265 --> 00:12:16.765 doctors

NOTE Confidence: 0.9511887

00:12:17.545 --> 00:12:19.305 and nurses and others from

NOTE Confidence: 0.9511887

00:12:19.305 --> 00:12:21.405 many different fields to provide

NOTE Confidence: 0.9511887

00:12:21.465 --> 00:12:22.845 optimal care.

NOTE Confidence: 0.9947583

00:12:23.385 --> 00:12:25.565 And as medical oncologists,

NOTE Confidence: 0.9992067

00:12:25.945 --> 00:12:27.725 we're not the ones prescribing

NOTE Confidence: 0.9665191

00:12:28.140 --> 00:12:29.900 fertility treatments

NOTE Confidence: 0.9665191

00:12:29.900 --> 00:12:31.020 and we need to work

NOTE Confidence: 0.9665191

00:12:31.020 --> 00:12:32.860 with our our colleagues in

00:12:33.740 --> 00:12:34.640 OB GYN.

00:12:36.620 --> 00:12:37.820 The treatment of breast cancer,

NOTE Confidence: 0.9493362

00:12:37.820 --> 00:12:39.200 the treatment of any cancer,

NOTE Confidence: 0.9493362  
00:12:39.260 --> 00:12:40.380 requires a lot of  
NOTE Confidence: 0.9493362  
00:12:40.380 --> 00:12:41.235 hands on deck,  
NOTE Confidence: 0.99487954  
00:12:42.195 --> 00:12:43.954 and close connections with  
NOTE Confidence: 0.99487954  
00:12:43.954 --> 00:12:45.394 lots of different disciplines and  
NOTE Confidence: 0.99487954  
00:12:45.394 --> 00:12:45.894 fields,  
NOTE Confidence: 0.9996214  
00:12:46.755 --> 00:12:47.714 to be able to provide  
NOTE Confidence: 0.9996214  
00:12:47.714 --> 00:12:48.695 truly comprehensive  
NOTE Confidence: 0.96142083  
00:12:49.554 --> 00:12:50.774 whole patient care.  
00:12:52.355 --> 00:12:53.475 I just wanna come  
NOTE Confidence: 0.98424786  
00:12:53.475 --> 00:12:54.774 back in our  
NOTE Confidence: 0.9997392  
00:12:55.075 --> 00:12:55.575 last  
NOTE Confidence: 0.9900179  
00:12:55.920 --> 00:12:57.700 few seconds before the break  
NOTE Confidence: 0.9900179  
00:12:57.760 --> 00:12:58.260 and  
NOTE Confidence: 0.9995691  
00:12:59.120 --> 00:13:00.880 just touch very briefly on  
NOTE Confidence: 0.9995691  
00:13:00.880 --> 00:13:01.860 the fact that  
NOTE Confidence: 0.9726431  
00:13:02.720 --> 00:13:04.080 we all recognize this is

NOTE Confidence: 0.9726431

00:13:04.080 --> 00:13:05.460 an emotionally charged

NOTE Confidence: 0.99022907

00:13:06.320 --> 00:13:08.080 experience. I mean, having cancer

NOTE Confidence: 0.99022907

00:13:08.080 --> 00:13:10.045 is hard enough. Having cancer

NOTE Confidence: 0.99022907

00:13:10.045 --> 00:13:12.045 and worrying about wanting to

NOTE Confidence: 0.99022907

00:13:12.045 --> 00:13:13.725 become pregnant or maybe even

NOTE Confidence: 0.99022907

00:13:13.725 --> 00:13:15.005 being pregnant at the time

NOTE Confidence: 0.99022907

00:13:15.005 --> 00:13:16.045 just makes it that much

NOTE Confidence: 0.99022907

00:13:16.045 --> 00:13:17.184 harder.

00:13:20.125 --> 00:13:21.024 It's hard enough,

NOTE Confidence: 0.97587705

00:13:22.190 --> 00:13:23.390 to have to have these

NOTE Confidence: 0.97587705

00:13:23.390 --> 00:13:25.150 conversations about treatment. And you

NOTE Confidence: 0.97587705

00:13:25.150 --> 00:13:25.650 throw

NOTE Confidence: 0.93085593

00:13:26.590 --> 00:13:28.050 fertility and families

NOTE Confidence: 0.89683384

00:13:28.429 --> 00:13:29.170 into it,

NOTE Confidence: 0.9862962

00:13:29.550 --> 00:13:30.850 it is that much harder.

NOTE Confidence: 0.9886686

00:13:31.470 --> 00:13:32.990 Well, we're gonna take just a

00:13:33.965 --> 00:13:35.885 very brief break, and I'll  
NOTE Confidence: 0.98987705

00:13:35.885 --> 00:13:37.184 return in  
NOTE Confidence: 0.9507359

00:13:37.804 --> 00:13:39.405 just a minute with doctor  
NOTE Confidence: 0.9507359

00:13:39.405 --> 00:13:40.225 Sarah Schellhorn,  
NOTE Confidence: 0.98759335

00:13:40.925 --> 00:13:43.325 associate professor at Yale School  
NOTE Confidence: 0.98759335

00:13:43.325 --> 00:13:45.325 of Medicine, and we'll continue  
NOTE Confidence: 0.98759335

00:13:45.325 --> 00:13:46.785 our conversation about  
NOTE Confidence: 0.9997964

00:13:47.565 --> 00:13:49.005 other issues related to breast  
NOTE Confidence: 0.9997964

00:13:49.005 --> 00:13:49.505 cancer.  
NOTE Confidence: 0.9590362

00:13:49.940 --> 00:13:51.620 Funding for Yale Cancer Answers  
NOTE Confidence: 0.9590362

00:13:51.620 --> 00:13:53.480 comes from Smilow Cancer Hospital,  
NOTE Confidence: 0.97430205

00:13:53.860 --> 00:13:55.540 where the lung cancer screening  
NOTE Confidence: 0.97430205

00:13:55.540 --> 00:13:57.220 program provides screening to those  
NOTE Confidence: 0.97430205

00:13:57.220 --> 00:13:58.679 at risk for lung cancer  
NOTE Confidence: 0.97430205

00:13:58.900 --> 00:13:59.720 and individualized  
NOTE Confidence: 0.9943216

00:14:00.179 --> 00:14:01.400 state of the art evaluation

NOTE Confidence: 0.9943216

00:14:01.540 --> 00:14:02.600 of lung nodules.

NOTE Confidence: 0.94404805

00:14:03.165 --> 00:14:04.705 To learn more, visit [smilowcancerhospital](http://smilowcancerhospital.org)

NOTE Confidence: 0.9847199

00:14:05.644 --> 00:14:06.464 dot org.

NOTE Confidence: 0.97986424

00:14:08.285 --> 00:14:10.445 The American Cancer Society estimates

NOTE Confidence: 0.97986424

00:14:10.445 --> 00:14:11.885 that over two hundred thousand

NOTE Confidence: 0.97986424

00:14:11.885 --> 00:14:13.485 cases of melanoma will be

NOTE Confidence: 0.97986424

00:14:13.485 --> 00:14:15.084 diagnosed in the United States

NOTE Confidence: 0.97986424

00:14:15.084 --> 00:14:16.445 this year, with over a

NOTE Confidence: 0.97986424

00:14:16.445 --> 00:14:18.625 thousand patients in Connecticut alone.

NOTE Confidence: 0.99042284

00:14:19.080 --> 00:14:19.820 While melanoma

NOTE Confidence: 0.99620515

00:14:20.120 --> 00:14:21.720 accounts for only about one

NOTE Confidence: 0.99620515

00:14:21.720 --> 00:14:23.820 percent of skin cancer cases,

NOTE Confidence: 0.9601329

00:14:24.120 --> 00:14:25.560 it causes the most skin

NOTE Confidence: 0.9601329

00:14:25.560 --> 00:14:27.660 cancer deaths, but when detected

NOTE Confidence: 0.9601329

00:14:27.720 --> 00:14:29.240 early it is easily treated

NOTE Confidence: 0.9601329

00:14:29.240 --> 00:14:30.300 and highly curable.  
NOTE Confidence: 0.95274913

00:14:31.074 --> 00:14:32.834 Clinical trials are currently underway  
NOTE Confidence: 0.95274913

00:14:32.834 --> 00:14:35.475 at federally designated comprehensive cancer  
NOTE Confidence: 0.95274913

00:14:35.475 --> 00:14:37.154 centers such as Yale Cancer  
NOTE Confidence: 0.95274913

00:14:37.154 --> 00:14:38.834 Center and at Smilow Cancer  
NOTE Confidence: 0.95274913

00:14:38.834 --> 00:14:39.334 Hospital  
NOTE Confidence: 0.9887846

00:14:39.714 --> 00:14:41.475 to test innovative new treatments  
NOTE Confidence: 0.9887846

00:14:41.475 --> 00:14:42.134 for melanoma.  
NOTE Confidence: 0.97237235

00:14:42.834 --> 00:14:44.055 The goal of the Specialized  
NOTE Confidence: 0.9930478

00:14:44.520 --> 00:14:46.360 programs of research excellence in  
NOTE Confidence: 0.9930478

00:14:46.360 --> 00:14:48.040 skin cancer grant is to  
NOTE Confidence: 0.9930478

00:14:48.040 --> 00:14:49.800 better understand the biology of  
NOTE Confidence: 0.9930478

00:14:49.800 --> 00:14:51.240 skin cancer with a focus  
NOTE Confidence: 0.9930478

00:14:51.240 --> 00:14:53.240 on discovering targets that will  
NOTE Confidence: 0.9930478

00:14:53.240 --> 00:14:55.000 lead to improved diagnosis and  
NOTE Confidence: 0.9930478

00:14:55.000 --> 00:14:55.500 treatment.



NOTE Confidence: 0.97804594  
00:14:56.120 --> 00:14:57.800 More information is available at  
NOTE Confidence: 0.97804594  
00:14:57.800 --> 00:14:59.740 yale cancer center dot org.  
NOTE Confidence: 0.97804594  
00:14:59.915 --> 00:15:01.515 You're listening to Connecticut Public  
NOTE Confidence: 0.97804594  
00:15:01.515 --> 00:15:02.015 Radio.  
NOTE Confidence: 0.9464989  
00:15:04.155 --> 00:15:05.915 Hello again. This is Eric  
NOTE Confidence: 0.9464989  
00:15:05.915 --> 00:15:07.595 Winer from the Yale Cancer  
NOTE Confidence: 0.9464989  
00:15:07.595 --> 00:15:08.895 Center here with Yale Cancer Answers.  
00:15:10.715 --> 00:15:12.575 And I'm joined tonight by  
NOTE Confidence: 0.9717757  
00:15:12.635 --> 00:15:14.950 doctor Sarah Schellhorn, associate professor  
NOTE Confidence: 0.9717757  
00:15:14.950 --> 00:15:15.529 of medicine  
NOTE Confidence: 0.92520314  
00:15:16.230 --> 00:15:18.170 and a breast cancer expert.  
NOTE Confidence: 0.9995775  
00:15:18.950 --> 00:15:20.250 We spent the last  
NOTE Confidence: 0.96207803  
00:15:20.709 --> 00:15:22.390 fifteen minutes or so talking  
NOTE Confidence: 0.96207803  
00:15:22.390 --> 00:15:24.730 about pregnancy and breast cancer.  
NOTE Confidence: 0.96207803  
00:15:24.790 --> 00:15:25.830 We're gonna move on and  
NOTE Confidence: 0.96207803  
00:15:25.830 --> 00:15:27.910 talk about other hormonal aspects

NOTE Confidence: 0.96207803  
00:15:27.910 --> 00:15:29.750 of breast cancer or in  
NOTE Confidence: 0.96207803  
00:15:29.750 --> 00:15:30.250 particular,  
NOTE Confidence: 0.9742384  
00:15:30.925 --> 00:15:33.505 hormonal or anti hormonal treatments.  
NOTE Confidence: 0.9962902  
00:15:35.085 --> 00:15:36.625 These are given to  
NOTE Confidence: 0.9995769  
00:15:37.085 --> 00:15:38.525 a large number of women  
NOTE Confidence: 0.9995769  
00:15:38.525 --> 00:15:39.585 with breast cancer  
NOTE Confidence: 0.51278156  
00:15:39.965 --> 00:15:40.465 because  
NOTE Confidence: 0.9822458  
00:15:41.165 --> 00:15:42.865 somewhere in the range of  
NOTE Confidence: 0.97923994  
00:15:43.485 --> 00:15:45.560 in excess of seventy  
NOTE Confidence: 0.97923994  
00:15:45.560 --> 00:15:46.680 five percent of all breast  
NOTE Confidence: 0.97923994  
00:15:46.680 --> 00:15:47.740 cancers  
NOTE Confidence: 0.9983459  
00:15:48.600 --> 00:15:50.699 are sensitive to female reproductive  
NOTE Confidence: 0.9983459  
00:15:50.839 --> 00:15:51.339 hormones.  
00:15:53.000 --> 00:15:53.500 Sarah,  
NOTE Confidence: 0.99968547  
00:15:54.040 --> 00:15:55.019 maybe you could  
NOTE Confidence: 0.90273255  
00:15:56.360 --> 00:15:57.420 just talk about

NOTE Confidence: 0.96307963

00:15:58.175 --> 00:15:59.795 generally the benefits

NOTE Confidence: 0.9998933

00:16:00.175 --> 00:16:00.675 of

NOTE Confidence: 0.9640505

00:16:01.135 --> 00:16:04.115 these anti hormonal treatments and

NOTE Confidence: 0.9640505

00:16:04.255 --> 00:16:06.895 perhaps describe the two most

NOTE Confidence: 0.9640505

00:16:06.895 --> 00:16:08.654 common ones that we use

NOTE Confidence: 0.9640505

00:16:08.654 --> 00:16:10.035 to help prevent recurrences.

NOTE Confidence: 0.9884527

00:16:10.495 --> 00:16:10.995 Sure.

NOTE Confidence: 0.96387434

00:16:11.580 --> 00:16:12.860 So it's really interesting.

NOTE Confidence: 0.96387434

00:16:12.860 --> 00:16:13.660 I think there's a kind

NOTE Confidence: 0.96387434

00:16:13.660 --> 00:16:15.980 of an interesting historical piece to

NOTE Confidence: 0.9519301

00:16:18.860 --> 00:16:20.220 the treatment of breast cancer.

NOTE Confidence: 0.9519301

00:16:20.220 --> 00:16:21.420 If you think back, and

NOTE Confidence: 0.9519301

00:16:21.420 --> 00:16:22.380 I can't give you

NOTE Confidence: 0.9519301

00:16:22.380 --> 00:16:24.300 an exact date, but many

NOTE Confidence: 0.9519301

00:16:24.300 --> 00:16:24.800 decades

NOTE Confidence: 0.9138001

00:16:25.420 --> 00:16:25.920 ago,

NOTE Confidence: 0.9996961

00:16:26.865 --> 00:16:28.325 the treatment of breast cancer

NOTE Confidence: 0.9700865

00:16:28.705 --> 00:16:30.465 was pretty morbid, lots of

NOTE Confidence: 0.9700865

00:16:30.465 --> 00:16:32.225 big surgeries. There were some

NOTE Confidence: 0.9700865

00:16:32.225 --> 00:16:33.985 studies of chemotherapy. But what

NOTE Confidence: 0.9700865

00:16:33.985 --> 00:16:36.865 was discovered was some

NOTE Confidence: 0.9700865

00:16:36.865 --> 00:16:38.225 in many women with breast

NOTE Confidence: 0.9700865

00:16:38.225 --> 00:16:38.725 cancer,

NOTE Confidence: 0.99121195

00:16:39.230 --> 00:16:40.990 taking out their ovaries and

NOTE Confidence: 0.99121195

00:16:40.990 --> 00:16:42.589 putting them into menopause seemed

NOTE Confidence: 0.99121195

00:16:42.589 --> 00:16:43.389 to be a pretty good

NOTE Confidence: 0.99121195

00:16:43.389 --> 00:16:44.670 treatment for breast cancer. And

NOTE Confidence: 0.99121195

00:16:44.670 --> 00:16:45.730 it was on that

00:16:47.470 --> 00:16:50.050 further studies showed that

NOTE Confidence: 0.99003845

00:16:50.269 --> 00:16:51.709 many breast cancers, as you

NOTE Confidence: 0.99003845

00:16:51.709 --> 00:16:52.209 said,

NOTE Confidence: 0.97567743

00:16:52.589 --> 00:16:54.385 probably more than three  
NOTE Confidence: 0.97567743

00:16:54.385 --> 00:16:55.845 quarters of all breast cancers,  
NOTE Confidence: 0.97567743

00:16:55.985 --> 00:16:56.485 express  
NOTE Confidence: 0.9981446

00:16:57.024 --> 00:16:58.865 the estrogen receptor or the  
NOTE Confidence: 0.9981446

00:16:58.865 --> 00:17:00.084 progesterone receptor.  
NOTE Confidence: 0.99925804

00:17:00.704 --> 00:17:02.225 And these are  
NOTE Confidence: 0.99925804

00:17:02.225 --> 00:17:02.725 hormone  
NOTE Confidence: 0.9997352

00:17:03.505 --> 00:17:05.045 receptors that require  
NOTE Confidence: 0.97577226

00:17:05.505 --> 00:17:07.285 kind of seeing the hormone,  
NOTE Confidence: 0.97577226

00:17:07.345 --> 00:17:08.565 estrogen or progesterone,  
NOTE Confidence: 0.9907177

00:17:09.270 --> 00:17:10.650 that leads to cells,  
NOTE Confidence: 0.97012776

00:17:10.950 --> 00:17:12.410 cancer cells in particular,  
NOTE Confidence: 0.99824303

00:17:13.270 --> 00:17:14.550 getting the signals they need  
NOTE Confidence: 0.99824303

00:17:14.550 --> 00:17:15.850 to grow and divide.  
NOTE Confidence: 0.9760934

00:17:16.150 --> 00:17:17.670 And so these cancers are,  
NOTE Confidence: 0.9760934

00:17:17.670 --> 00:17:20.010 in essence, fueled by hormones.

NOTE Confidence: 0.9988129  
00:17:21.190 --> 00:17:21.690 And  
NOTE Confidence: 0.99947244  
00:17:22.675 --> 00:17:24.595 a number of different types  
NOTE Confidence: 0.99947244  
00:17:24.595 --> 00:17:25.975 of drugs have been developed  
NOTE Confidence: 0.99911225  
00:17:26.355 --> 00:17:28.215 that work on that interaction  
00:17:30.515 --> 00:17:32.275 between the hormone and its  
NOTE Confidence: 0.99887294  
00:17:32.275 --> 00:17:32.775 receptor.  
NOTE Confidence: 0.9945087  
00:17:33.395 --> 00:17:34.515 The oldest is a drug  
NOTE Confidence: 0.9945087  
00:17:34.515 --> 00:17:35.255 called tamoxifen,  
NOTE Confidence: 0.903396  
00:17:36.400 --> 00:17:36.900 which  
NOTE Confidence: 0.9995923  
00:17:37.920 --> 00:17:39.140 is a competitive  
NOTE Confidence: 0.9816038  
00:17:39.760 --> 00:17:41.440 antagonist in the breast  
NOTE Confidence: 0.9816038  
00:17:41.440 --> 00:17:43.200 of estrogen. All that means  
NOTE Confidence: 0.9816038  
00:17:43.200 --> 00:17:44.080 is if we think about  
NOTE Confidence: 0.9816038  
00:17:44.080 --> 00:17:45.280 a receptor kind of like  
NOTE Confidence: 0.9816038  
00:17:45.280 --> 00:17:46.340 a baseball glove  
NOTE Confidence: 0.9446533  
00:17:46.720 --> 00:17:47.680 and we think about the

NOTE Confidence: 0.9446533  
00:17:47.680 --> 00:17:49.359 hormone like a baseball and  
NOTE Confidence: 0.9446533  
00:17:49.359 --> 00:17:50.640 the glove catches the  
NOTE Confidence: 0.9446533  
00:17:50.640 --> 00:17:51.140 baseball,  
NOTE Confidence: 0.90089107  
00:17:51.815 --> 00:17:52.315 tamoxifen  
NOTE Confidence: 0.99378556  
00:17:52.695 --> 00:17:53.895 is kind of like a  
NOTE Confidence: 0.99378556  
00:17:53.895 --> 00:17:54.395 grapefruit.  
NOTE Confidence: 0.98893183  
00:17:54.855 --> 00:17:56.535 And if you're holding it running  
NOTE Confidence: 0.98893183  
00:17:56.535 --> 00:17:57.895 around in the outfield of  
NOTE Confidence: 0.98893183  
00:17:57.895 --> 00:17:59.174 a baseball field, holding a  
NOTE Confidence: 0.98893183  
00:17:59.174 --> 00:18:00.455 grapefruit in your baseball glove,  
NOTE Confidence: 0.98893183  
00:18:00.455 --> 00:18:01.415 you're never gonna be able  
NOTE Confidence: 0.98893183  
00:18:01.415 --> 00:18:02.455 to catch a baseball. It's  
NOTE Confidence: 0.98893183  
00:18:02.455 --> 00:18:03.415 kind of how I describe  
NOTE Confidence: 0.98893183  
00:18:03.415 --> 00:18:04.155 it to patients.  
NOTE Confidence: 0.9834553  
00:18:05.655 --> 00:18:06.155 But  
NOTE Confidence: 0.7837815

00:18:06.520 --> 00:18:08.119 Tamoxifen blocks that as the result.  
NOTE Confidence: 0.7837815

00:18:08.119 --> 00:18:09.799 Great way of describing  
NOTE Confidence: 0.7837815

00:18:09.799 --> 00:18:11.640 it and for listeners it actually even  
NOTE Confidence: 0.7837815

00:18:11.640 --> 00:18:13.500 works without seeing your hands.  
00:18:14.679 --> 00:18:15.640 I've got some  
NOTE Confidence: 0.98227555

00:18:15.640 --> 00:18:17.240 really great hand gestures going  
NOTE Confidence: 0.98227555

00:18:17.240 --> 00:18:18.440 on right now.  
NOTE Confidence: 0.98227555

00:18:18.440 --> 00:18:20.440 It then leads into a big conversations about  
NOTE Confidence: 0.98227555

00:18:20.440 --> 00:18:21.340 baseball teams  
NOTE Confidence: 0.99125713

00:18:21.875 --> 00:18:23.235 and Yankees and  
NOTE Confidence: 0.99125713

00:18:23.235 --> 00:18:24.615 Red Sox, but I won't  
NOTE Confidence: 0.99125713

00:18:24.835 --> 00:18:26.615 go there. But,  
NOTE Confidence: 0.89485437

00:18:26.994 --> 00:18:27.494 tamoxifen,  
NOTE Confidence: 0.9995751

00:18:28.355 --> 00:18:29.975 when it's given for  
NOTE Confidence: 0.98885584

00:18:30.435 --> 00:18:31.975 five years, maybe longer,  
NOTE Confidence: 0.9996163

00:18:32.435 --> 00:18:34.215 has been shown to reduce  
NOTE Confidence: 0.9996163



00:18:34.275 --> 00:18:35.475 the chances of a breast  
NOTE Confidence: 0.9996163

00:18:35.475 --> 00:18:37.335 cancer coming back by about  
NOTE Confidence: 0.9627263

00:18:38.309 --> 00:18:39.830 half, by a  
NOTE Confidence: 0.9627263

00:18:39.830 --> 00:18:40.330 relative  
NOTE Confidence: 0.9987279

00:18:40.630 --> 00:18:42.890 risk reduction of fifty percent.  
NOTE Confidence: 0.92804503

00:18:44.230 --> 00:18:45.270 And if we can just  
NOTE Confidence: 0.92804503

00:18:45.270 --> 00:18:46.309 say for a minute what  
NOTE Confidence: 0.92804503

00:18:46.309 --> 00:18:48.470 that means in people's  
NOTE Confidence: 0.92804503

00:18:48.470 --> 00:18:48.970 terms.  
NOTE Confidence: 0.9821198

00:18:49.270 --> 00:18:51.109 So if you have a  
00:18:51.955 --> 00:18:53.395 ten percent chance of having  
NOTE Confidence: 0.9863385

00:18:53.395 --> 00:18:54.675 a recurrence, it goes down  
NOTE Confidence: 0.9863385

00:18:54.675 --> 00:18:56.435 to about five. If  
NOTE Confidence: 0.9863385

00:18:56.435 --> 00:18:58.035 you have a twenty five  
NOTE Confidence: 0.9863385

00:18:58.035 --> 00:18:59.555 percent chance of having a  
NOTE Confidence: 0.9863385

00:18:59.555 --> 00:19:01.475 recurrence of your cancer, because  
NOTE Confidence: 0.9863385

00:19:01.475 --> 00:19:02.835 it's a higher risk cancer,  
NOTE Confidence: 0.9863385

00:19:02.835 --> 00:19:04.035 it would go down to  
NOTE Confidence: 0.9863385

00:19:04.035 --> 00:19:05.494 twelve and a half percent.  
NOTE Confidence: 0.9936733

00:19:05.955 --> 00:19:06.455 Right.  
NOTE Confidence: 0.93229735

00:19:06.970 --> 00:19:08.909 It's pretty powerful treatments.  
NOTE Confidence: 0.75417125

00:19:11.210 --> 00:19:11.950 Arguably it is the first  
NOTE Confidence: 0.99005175

00:19:12.330 --> 00:19:13.309 real personalized  
NOTE Confidence: 0.98583657

00:19:13.769 --> 00:19:15.710 targeted therapy in cancer.  
NOTE Confidence: 0.9682452

00:19:17.850 --> 00:19:19.769 So tamoxifen's been around for  
NOTE Confidence: 0.9682452

00:19:19.769 --> 00:19:21.070 years and years and years.  
NOTE Confidence: 0.9674007

00:19:23.774 --> 00:19:24.975 And it's got sort of  
NOTE Confidence: 0.9674007

00:19:24.975 --> 00:19:26.575 a bad rap.  
NOTE Confidence: 0.9674007

00:19:26.575 --> 00:19:27.934 Why is that?  
NOTE Confidence: 0.9674007

00:19:27.934 --> 00:19:28.515 I think  
NOTE Confidence: 0.99353075

00:19:29.215 --> 00:19:30.654 with the advent of social  
NOTE Confidence: 0.99353075

00:19:30.654 --> 00:19:32.975 media and online

NOTE Confidence: 0.99353075  
00:19:32.975 --> 00:19:33.794 web based  
NOTE Confidence: 0.9887045  
00:19:34.174 --> 00:19:35.695 chat groups, there's a lot  
NOTE Confidence: 0.9887045  
00:19:35.695 --> 00:19:37.075 of information sharing.  
NOTE Confidence: 0.9968266  
00:19:37.534 --> 00:19:38.034 And  
NOTE Confidence: 0.9848712  
00:19:39.190 --> 00:19:40.710 tamoxifen does have some potential  
NOTE Confidence: 0.9848712  
00:19:40.710 --> 00:19:42.550 side effects. It can cause  
NOTE Confidence: 0.9848712  
00:19:42.550 --> 00:19:44.230 hot flashes. It can cause  
NOTE Confidence: 0.9848712  
00:19:44.230 --> 00:19:45.910 mood changes. It can cause  
NOTE Confidence: 0.9848712  
00:19:45.910 --> 00:19:47.510 fluid retention and weight gain  
NOTE Confidence: 0.9848712  
00:19:47.510 --> 00:19:49.190 and cause people to not  
NOTE Confidence: 0.9848712  
00:19:49.190 --> 00:19:49.690 feel  
NOTE Confidence: 0.8714397  
00:19:49.990 --> 00:19:51.610 terribly normal, causes headaches.  
NOTE Confidence: 0.99925977  
00:19:52.365 --> 00:19:54.305 Lots of things that  
NOTE Confidence: 0.9874134  
00:19:54.685 --> 00:19:57.405 are maybe not horrible from  
NOTE Confidence: 0.9874134  
00:19:57.405 --> 00:19:58.925 a medical standpoint, but from  
NOTE Confidence: 0.9874134

00:19:58.925 --> 00:19:59.744 a lifestyle  
NOTE Confidence: 0.9888191

00:20:00.285 --> 00:20:01.725 quality of life standpoint can  
NOTE Confidence: 0.9888191

00:20:01.725 --> 00:20:02.465 be really  
NOTE Confidence: 0.9931314

00:20:03.005 --> 00:20:03.505 problematic.  
NOTE Confidence: 0.99875283

00:20:04.925 --> 00:20:05.984 But many women  
NOTE Confidence: 0.9944986

00:20:06.720 --> 00:20:08.260 tolerate the pill just fine.  
NOTE Confidence: 0.9994149

00:20:08.720 --> 00:20:09.220 And  
NOTE Confidence: 0.9992385

00:20:09.520 --> 00:20:10.720 when we think about who  
00:20:11.600 --> 00:20:12.740 are the  
NOTE Confidence: 0.98813796

00:20:13.040 --> 00:20:14.720 loudest people on these web  
NOTE Confidence: 0.98813796

00:20:14.720 --> 00:20:16.640 based chat groups, often it's  
NOTE Confidence: 0.98813796

00:20:16.640 --> 00:20:18.240 the people who are having  
NOTE Confidence: 0.98813796

00:20:18.240 --> 00:20:18.900 the problems,  
NOTE Confidence: 0.9994248

00:20:20.160 --> 00:20:21.195 that  
NOTE Confidence: 0.9993449

00:20:21.674 --> 00:20:22.174 appropriately,  
NOTE Confidence: 0.98851395

00:20:22.955 --> 00:20:24.315 are asking for help and  
NOTE Confidence: 0.98851395

00:20:24.315 --> 00:20:26.174 asking for advice.  
NOTE Confidence: 0.99943644

00:20:26.554 --> 00:20:27.434 And the people who are  
NOTE Confidence: 0.99943644

00:20:27.434 --> 00:20:28.414 doing just fine  
NOTE Confidence: 0.9676156

00:20:28.715 --> 00:20:29.914 are living their lives and it  
NOTE Confidence: 0.9961828

00:20:32.875 --> 00:20:34.530 tends to be a little  
NOTE Confidence: 0.9961828

00:20:34.530 --> 00:20:36.450 bit more problematic in younger  
NOTE Confidence: 0.9961828

00:20:36.450 --> 00:20:38.470 women than older women. So  
NOTE Confidence: 0.9961828

00:20:38.770 --> 00:20:39.510 you put  
NOTE Confidence: 0.97110045

00:20:40.130 --> 00:20:41.250 a thirty five year old  
NOTE Confidence: 0.97110045

00:20:41.250 --> 00:20:42.310 woman on Tamoxifen,  
NOTE Confidence: 0.98738277

00:20:42.690 --> 00:20:43.970 and at least in  
NOTE Confidence: 0.98738277

00:20:43.970 --> 00:20:44.630 my practice,  
NOTE Confidence: 0.9982336

00:20:45.250 --> 00:20:47.405 I tend to expect a  
NOTE Confidence: 0.9982336

00:20:47.405 --> 00:20:48.605 few more symptoms than I  
NOTE Confidence: 0.9982336

00:20:48.605 --> 00:20:50.045 would in somebody twenty years  
NOTE Confidence: 0.9982336

00:20:50.045 --> 00:20:50.545 older.

NOTE Confidence: 0.99855226  
00:20:51.244 --> 00:20:52.845 And I think it's  
NOTE Confidence: 0.99855226  
00:20:52.845 --> 00:20:53.984 important to remember  
NOTE Confidence: 0.9988551  
00:20:54.285 --> 00:20:56.545 that estrogen and progesterone  
NOTE Confidence: 0.9988551  
00:20:56.845 --> 00:20:58.145 really do serve a purpose  
NOTE Confidence: 0.9255627  
00:20:58.445 --> 00:20:59.345 in women.  
NOTE Confidence: 0.9976082  
00:21:00.045 --> 00:21:00.545 And  
NOTE Confidence: 0.99587893  
00:21:01.470 --> 00:21:02.369 messing around,  
NOTE Confidence: 0.9998766  
00:21:02.830 --> 00:21:03.330 manipulating  
NOTE Confidence: 0.99739325  
00:21:03.630 --> 00:21:04.130 hormones,  
NOTE Confidence: 0.9651171  
00:21:05.630 --> 00:21:07.710 can cause problems and  
NOTE Confidence: 0.9651171  
00:21:07.710 --> 00:21:09.390 and big ones that really  
NOTE Confidence: 0.9651171  
00:21:09.550 --> 00:21:11.809 impact somebody's  
NOTE Confidence: 0.999393  
00:21:12.750 --> 00:21:13.650 day to day.  
NOTE Confidence: 0.9903756  
00:21:14.145 --> 00:21:15.665 Hot flashes, if they happen  
NOTE Confidence: 0.9903756  
00:21:15.665 --> 00:21:17.265 only once every few days,  
NOTE Confidence: 0.9903756

00:21:17.265 --> 00:21:18.305 probably not that big a  
NOTE Confidence: 0.9903756

00:21:18.305 --> 00:21:19.665 deal. But hot flashes that  
NOTE Confidence: 0.9903756

00:21:19.665 --> 00:21:20.785 are happening ten times a  
NOTE Confidence: 0.9903756

00:21:20.785 --> 00:21:22.305 night and preventing somebody from  
NOTE Confidence: 0.9903756

00:21:22.305 --> 00:21:22.805 sleeping and  
NOTE Confidence: 0.995854

00:21:23.665 --> 00:21:25.605 leads to chronic fatigue and  
NOTE Confidence: 0.995854

00:21:25.825 --> 00:21:27.905 mental foginess, that's  
NOTE Confidence: 0.995854

00:21:27.905 --> 00:21:29.445 really a big deal.  
NOTE Confidence: 0.9995551

00:21:29.760 --> 00:21:30.800 And so a lot of  
NOTE Confidence: 0.9995551

00:21:30.800 --> 00:21:32.080 the conversations that we have  
NOTE Confidence: 0.9995551

00:21:32.080 --> 00:21:32.660 in clinic  
NOTE Confidence: 0.99904156

00:21:33.520 --> 00:21:35.300 relate to that absolute  
NOTE Confidence: 0.99992335

00:21:35.760 --> 00:21:36.260 benefit  
NOTE Confidence: 0.9967438

00:21:36.720 --> 00:21:37.220 conversation  
NOTE Confidence: 0.99732774

00:21:37.520 --> 00:21:38.500 and the relative  
NOTE Confidence: 0.93359023

00:21:38.800 --> 00:21:40.500 benefit. So, yes, while tamoxifen

NOTE Confidence: 0.9984762

00:21:40.800 --> 00:21:42.320 reduces the chances of a

NOTE Confidence: 0.9984762

00:21:42.320 --> 00:21:42.820 cancer

NOTE Confidence: 0.9837339

00:21:43.359 --> 00:21:45.060 recurring by fifty percent,

NOTE Confidence: 0.9980532

00:21:45.705 --> 00:21:47.225 if someone's risk of a

NOTE Confidence: 0.9980532

00:21:47.225 --> 00:21:49.244 cancer recurring is really small,

NOTE Confidence: 0.9860714

00:21:49.945 --> 00:21:51.544 the benefit of tamoxifen is

NOTE Confidence: 0.9860714

00:21:51.544 --> 00:21:52.605 also really small.

NOTE Confidence: 0.996939

00:21:53.544 --> 00:21:55.325 And for many women,

NOTE Confidence: 0.996939

00:21:55.385 --> 00:21:56.684 it may not be enough to

00:21:59.680 --> 00:22:01.200 warrant staying on a medication

NOTE Confidence: 0.9973353

00:22:01.200 --> 00:22:02.260 that makes them miserable.

NOTE Confidence: 0.9863807

00:22:02.880 --> 00:22:04.980 Absolutely, and

NOTE Confidence: 0.9767668

00:22:05.359 --> 00:22:07.200 there are alternatives to

NOTE Confidence: 0.9767668

00:22:07.200 --> 00:22:09.300 tamoxifen as well.

NOTE Confidence: 0.9940627

00:22:10.320 --> 00:22:12.080 So there's another class of

NOTE Confidence: 0.9940627

00:22:12.080 --> 00:22:14.260 medicines called aromatase inhibitors.



NOTE Confidence: 0.9901441

00:22:15.545 --> 00:22:16.825 Going back to my baseball

NOTE Confidence: 0.9901441

00:22:16.825 --> 00:22:17.325 analogy,

NOTE Confidence: 0.991848

00:22:18.025 --> 00:22:20.105 aromatase inhibitors basically remove all

NOTE Confidence: 0.991848

00:22:20.105 --> 00:22:21.465 the baseballs. So you can't

NOTE Confidence: 0.991848

00:22:21.465 --> 00:22:22.285 catch a baseball

NOTE Confidence: 0.994488

00:22:22.665 --> 00:22:23.705 if there are no baseballs

NOTE Confidence: 0.994488

00:22:23.705 --> 00:22:24.925 to be caught. It

NOTE Confidence: 0.5744431

00:22:25.625 --> 00:22:26.765 basically prevents

NOTE Confidence: 0.9998214

00:22:28.390 --> 00:22:29.990 a woman from being able

NOTE Confidence: 0.9998214

00:22:29.990 --> 00:22:31.050 to make estrogen.

NOTE Confidence: 0.9997609

00:22:32.150 --> 00:22:33.609 It has to be given

NOTE Confidence: 0.9876689

00:22:33.910 --> 00:22:35.850 in conjunction with other medicines

NOTE Confidence: 0.9876689

00:22:35.990 --> 00:22:37.510 in very young women who

NOTE Confidence: 0.9876689

00:22:37.510 --> 00:22:38.809 have ovarian function.

NOTE Confidence: 0.93437153

00:22:40.625 --> 00:22:41.825 So that gets a little

NOTE Confidence: 0.93437153

00:22:41.825 --> 00:22:42.885 bit more complicated.  
NOTE Confidence: 0.9990976

00:22:44.145 --> 00:22:44.645 But  
NOTE Confidence: 0.9993258

00:22:45.025 --> 00:22:47.445 these medicines reduce estrogen levels  
NOTE Confidence: 0.9993258

00:22:47.505 --> 00:22:48.005 from  
NOTE Confidence: 0.9998327

00:22:48.545 --> 00:22:49.445 a low level  
NOTE Confidence: 0.99775976

00:22:49.825 --> 00:22:52.005 to a very low level,  
NOTE Confidence: 0.99775976

00:22:52.225 --> 00:22:52.650 almost  
NOTE Confidence: 0.9587157

00:22:53.050 --> 00:22:54.190 undetectable level.  
00:22:56.010 --> 00:22:56.970 I was just gonna jump  
NOTE Confidence: 0.902806

00:22:56.970 --> 00:22:58.250 in and say, you use  
NOTE Confidence: 0.902806

00:22:58.250 --> 00:22:58.990 the baseball,  
NOTE Confidence: 0.9547849

00:22:59.930 --> 00:23:02.030 metaphor. I typically  
NOTE Confidence: 0.9547849

00:23:02.090 --> 00:23:02.590 describe  
NOTE Confidence: 0.95183843

00:23:03.290 --> 00:23:05.130 giving one of these  
NOTE Confidence: 0.95183843

00:23:05.130 --> 00:23:05.630 medicines  
NOTE Confidence: 0.9838892

00:23:06.010 --> 00:23:08.575 along with suppressing ovarian function,  
NOTE Confidence: 0.9838892

00:23:08.575 --> 00:23:09.455 which is what we have  
NOTE Confidence: 0.9838892

00:23:09.455 --> 00:23:10.494 to do when we do  
NOTE Confidence: 0.9838892

00:23:10.494 --> 00:23:12.195 it in a young woman,  
NOTE Confidence: 0.95629096

00:23:12.734 --> 00:23:13.234 as  
NOTE Confidence: 0.9925815

00:23:14.255 --> 00:23:16.174 entering menopause by jumping off  
NOTE Confidence: 0.9925815

00:23:16.174 --> 00:23:17.234 the high dive  
NOTE Confidence: 0.9225358

00:23:17.695 --> 00:23:19.455 instead of instead of wading  
NOTE Confidence: 0.9225358

00:23:19.455 --> 00:23:20.515 into the water.  
NOTE Confidence: 0.9564114

00:23:20.950 --> 00:23:22.070 It's not  
NOTE Confidence: 0.9564114

00:23:22.070 --> 00:23:23.510 a slow process. It's not  
NOTE Confidence: 0.9564114

00:23:23.510 --> 00:23:24.730 a natural process.  
NOTE Confidence: 0.9957504

00:23:25.270 --> 00:23:26.890 That's not what normally happens.  
00:23:28.790 --> 00:23:30.070 So the side effects of  
NOTE Confidence: 0.999376

00:23:30.070 --> 00:23:31.450 those aromatase inhibitors  
NOTE Confidence: 0.9291969

00:23:31.910 --> 00:23:33.110 is just kind of like  
NOTE Confidence: 0.9291969

00:23:33.110 --> 00:23:35.369 menopause only more so.  
NOTE Confidence: 0.99761266

00:23:35.715 --> 00:23:38.135 And you think about  
NOTE Confidence: 0.99761266

00:23:38.355 --> 00:23:39.255 putting somebody  
NOTE Confidence: 0.9996004

00:23:40.195 --> 00:23:41.494 who has normal  
NOTE Confidence: 0.96933556

00:23:42.195 --> 00:23:43.414 ovaries, whose  
NOTE Confidence: 0.9683209

00:23:44.035 --> 00:23:46.215 normal ovarian function has  
NOTE Confidence: 0.9996707

00:23:46.595 --> 00:23:48.294 fluctuating levels of hormones  
NOTE Confidence: 0.95583594

00:23:48.674 --> 00:23:50.615 and has normal menstrual cycles  
NOTE Confidence: 0.9986154

00:23:51.210 --> 00:23:52.109 into menopause  
NOTE Confidence: 0.88388073

00:23:52.410 --> 00:23:53.230 is like  
NOTE Confidence: 0.9820747

00:23:53.850 --> 00:23:54.890 jumping in from the high  
NOTE Confidence: 0.9820747

00:23:54.890 --> 00:23:56.250 dive or going from sixty  
NOTE Confidence: 0.9820747

00:23:56.250 --> 00:23:57.530 miles an hour down to  
NOTE Confidence: 0.9820747

00:23:57.530 --> 00:23:58.030 zero,  
NOTE Confidence: 0.98806304

00:23:58.410 --> 00:23:59.790 it can be very jarring.  
NOTE Confidence: 0.98806304

00:23:59.929 --> 00:24:01.210 And what's funny is for  
NOTE Confidence: 0.98806304

00:24:01.210 --> 00:24:01.950 some people,

NOTE Confidence: 0.9825732  
00:24:02.330 --> 00:24:04.330 it's associated with almost no  
NOTE Confidence: 0.9825732  
00:24:04.330 --> 00:24:04.830 symptoms.  
NOTE Confidence: 0.9992346  
00:24:05.345 --> 00:24:06.645 And for other people  
NOTE Confidence: 0.96493137  
00:24:07.105 --> 00:24:08.145 and I don't know  
NOTE Confidence: 0.96493137  
00:24:08.145 --> 00:24:09.345 how to predict this, it's  
NOTE Confidence: 0.96493137  
00:24:09.505 --> 00:24:10.805 just miserable.  
NOTE Confidence: 0.9435222  
00:24:11.425 --> 00:24:14.305 I hope someday we  
NOTE Confidence: 0.9435222  
00:24:14.305 --> 00:24:15.265 get to a point where  
NOTE Confidence: 0.9435222  
00:24:15.265 --> 00:24:16.325 we're able to  
NOTE Confidence: 0.9856833  
00:24:17.185 --> 00:24:18.945 predict how someone is going  
NOTE Confidence: 0.9856833  
00:24:18.945 --> 00:24:20.280 to feel. And I don't  
NOTE Confidence: 0.9856833  
00:24:20.280 --> 00:24:21.480 know what we'll use to  
NOTE Confidence: 0.9856833  
00:24:21.480 --> 00:24:22.540 predict that. Maybe  
NOTE Confidence: 0.93269515  
00:24:23.000 --> 00:24:24.460 there will be some  
NOTE Confidence: 0.93269515  
00:24:24.680 --> 00:24:25.180 smart  
NOTE Confidence: 0.9806257

00:24:25.800 --> 00:24:27.800 genome technology. Maybe there will

NOTE Confidence: 0.9806257

00:24:27.800 --> 00:24:29.980 be some prior menstrual history

NOTE Confidence: 0.9806257

00:24:30.200 --> 00:24:31.480 piece to all of this,

NOTE Confidence: 0.9806257

00:24:31.480 --> 00:24:33.275 but that's a

NOTE Confidence: 0.9806257

00:24:33.275 --> 00:24:34.635 hard conversation to have. The

NOTE Confidence: 0.9806257

00:24:34.635 --> 00:24:35.275 only way to know if

NOTE Confidence: 0.9806257

00:24:35.275 --> 00:24:36.555 someone's gonna have side effects

NOTE Confidence: 0.9806257

00:24:36.555 --> 00:24:37.755 is for them to try

NOTE Confidence: 0.9806257

00:24:37.755 --> 00:24:39.615 it and see what happens.

NOTE Confidence: 0.98692214

00:24:40.075 --> 00:24:40.875 And I think the

NOTE Confidence: 0.98692214

00:24:40.875 --> 00:24:42.155 point you made that, you

NOTE Confidence: 0.98692214

00:24:42.155 --> 00:24:43.595 know, we give these medicines

NOTE Confidence: 0.98692214

00:24:43.595 --> 00:24:44.895 for a long time. So

NOTE Confidence: 0.98692214

00:24:45.100 --> 00:24:46.859 these are symptoms that may

NOTE Confidence: 0.98692214

00:24:46.859 --> 00:24:48.379 not be life threatening, but

NOTE Confidence: 0.98692214

00:24:48.379 --> 00:24:50.399 they're pretty annoying. And so

NOTE Confidence: 0.9778126

00:24:50.779 --> 00:24:52.480 putting up with them for

NOTE Confidence: 0.9778126

00:24:52.539 --> 00:24:54.059 a number of years for

NOTE Confidence: 0.9778126

00:24:54.059 --> 00:24:55.440 many women is often

NOTE Confidence: 0.99962234

00:24:56.139 --> 00:24:56.639 challenging

NOTE Confidence: 0.8851595

00:24:57.019 --> 00:24:58.460 to say the least.

NOTE Confidence: 0.8851595

00:24:58.460 --> 00:24:58.960 Now,

NOTE Confidence: 0.993254

00:24:59.815 --> 00:25:01.515 on the other hand, these

NOTE Confidence: 0.9478301

00:25:02.215 --> 00:25:02.715 hormonal,

NOTE Confidence: 0.85457987

00:25:03.095 --> 00:25:03.595 antihormonal,

NOTE Confidence: 0.9845817

00:25:04.135 --> 00:25:05.895 endocrine therapies, they're called all

NOTE Confidence: 0.9845817

00:25:05.895 --> 00:25:07.275 of these different things,

NOTE Confidence: 0.96531725

00:25:07.734 --> 00:25:08.234 sometimes,

NOTE Confidence: 0.98828954

00:25:09.335 --> 00:25:11.415 are far more beneficial than

NOTE Confidence: 0.98828954

00:25:11.415 --> 00:25:12.715 treatments like chemotherapy,

NOTE Confidence: 0.9825856

00:25:13.175 --> 00:25:14.375 and it all depends on

NOTE Confidence: 0.9825856

00:25:14.375 --> 00:25:16.359 the tumor.  
NOTE Confidence: 0.9825856

00:25:16.359 --> 00:25:17.340 That's exactly right.  
NOTE Confidence: 0.94868577

00:25:18.840 --> 00:25:20.540 Breast cancer isn't one disease.  
NOTE Confidence: 0.9992015

00:25:21.080 --> 00:25:23.660 And it's this big spectrum  
NOTE Confidence: 0.9908905

00:25:24.119 --> 00:25:25.580 of diseases,  
NOTE Confidence: 0.9780778

00:25:26.200 --> 00:25:27.640 each of which is treated  
NOTE Confidence: 0.9780778

00:25:27.640 --> 00:25:28.760 a little bit differently  
NOTE Confidence: 0.9780778

00:25:28.760 --> 00:25:29.800 or even a lot bit  
NOTE Confidence: 0.9780778

00:25:29.800 --> 00:25:30.300 differently.  
NOTE Confidence: 0.99339265

00:25:31.765 --> 00:25:33.605 We make decisions based on  
NOTE Confidence: 0.99339265

00:25:33.605 --> 00:25:34.484 a few things that the  
NOTE Confidence: 0.99339265

00:25:34.484 --> 00:25:35.845 pathologist tells us when they  
NOTE Confidence: 0.99339265

00:25:35.845 --> 00:25:36.805 look at the cancer under  
NOTE Confidence: 0.99339265

00:25:36.805 --> 00:25:38.005 the microscope. We look at  
NOTE Confidence: 0.99339265

00:25:38.005 --> 00:25:39.525 the grade of the cancer.  
NOTE Confidence: 0.99339265

00:25:39.525 --> 00:25:40.565 That's a measure of how



NOTE Confidence: 0.99339265  
00:25:40.565 --> 00:25:41.925 aggressive the cells look under  
NOTE Confidence: 0.99339265  
00:25:41.925 --> 00:25:42.505 the microscope.  
NOTE Confidence: 0.98137057  
00:25:43.125 --> 00:25:44.340 We look at the  
NOTE Confidence: 0.98137057  
00:25:44.580 --> 00:25:46.020 percent of cells that have  
NOTE Confidence: 0.98137057  
00:25:46.020 --> 00:25:47.299 the estrogen receptor or the  
NOTE Confidence: 0.98137057  
00:25:47.299 --> 00:25:48.440 progesterone receptor.  
NOTE Confidence: 0.9678141  
00:25:48.740 --> 00:25:50.179 And then there's this may  
NOTE Confidence: 0.9678141  
00:25:50.179 --> 00:25:51.059 be where you were going  
NOTE Confidence: 0.9678141  
00:25:51.059 --> 00:25:52.580 with this question, but  
NOTE Confidence: 0.9678141  
00:25:52.580 --> 00:25:54.500 there's this test called the  
NOTE Confidence: 0.9678141  
00:25:54.500 --> 00:25:55.720 Oncotype test,  
NOTE Confidence: 0.9989798  
00:25:57.220 --> 00:25:58.039 which is  
NOTE Confidence: 0.9992135  
00:25:58.865 --> 00:26:00.885 a test of a patient's  
NOTE Confidence: 0.9992135  
00:26:00.945 --> 00:26:02.165 individual cancer.  
NOTE Confidence: 0.99962866  
00:26:02.945 --> 00:26:04.645 It looks at twenty one  
NOTE Confidence: 0.9997873

00:26:04.945 --> 00:26:05.445 cancer  
NOTE Confidence: 0.9644623

00:26:05.825 --> 00:26:06.965 related genes,  
NOTE Confidence: 0.99573714

00:26:07.505 --> 00:26:08.385 and it looks at the  
NOTE Confidence: 0.99573714

00:26:08.385 --> 00:26:09.825 levels of those genes and  
NOTE Confidence: 0.99573714

00:26:09.825 --> 00:26:11.540 what levels they're expressed at.  
NOTE Confidence: 0.99522185

00:26:11.920 --> 00:26:13.040 And based on the  
NOTE Confidence: 0.99522185

00:26:13.040 --> 00:26:14.400 levels of those genes, it  
NOTE Confidence: 0.99522185

00:26:14.400 --> 00:26:16.340 goes into this very complicated  
NOTE Confidence: 0.99522185

00:26:16.640 --> 00:26:17.140 algorithm,  
NOTE Confidence: 0.977784

00:26:18.080 --> 00:26:19.440 that some very smart people  
NOTE Confidence: 0.977784

00:26:19.440 --> 00:26:21.440 developed many years ago. And  
NOTE Confidence: 0.977784

00:26:21.440 --> 00:26:23.119 then it spits  
NOTE Confidence: 0.977784

00:26:23.119 --> 00:26:23.619 out  
NOTE Confidence: 0.9770003

00:26:23.920 --> 00:26:25.904 a number. And so you  
NOTE Confidence: 0.9770003

00:26:25.904 --> 00:26:26.404 often,  
NOTE Confidence: 0.9984243

00:26:27.184 --> 00:26:28.625 in breast cancer circles, you

NOTE Confidence: 0.9984243

00:26:28.625 --> 00:26:29.664 may have people saying, well,

NOTE Confidence: 0.9984243

00:26:29.664 --> 00:26:30.625 what was your number? What

NOTE Confidence: 0.9984243

00:26:30.625 --> 00:26:31.445 was your number?

NOTE Confidence: 0.9844092

00:26:31.825 --> 00:26:33.345 The recurrent score is a

NOTE Confidence: 0.9844092

00:26:33.345 --> 00:26:34.465 number, and it's on a

NOTE Confidence: 0.9844092

00:26:34.465 --> 00:26:35.825 scale of zero to a

NOTE Confidence: 0.9844092

00:26:35.825 --> 00:26:36.325 hundred.

NOTE Confidence: 0.9992554

00:26:36.865 --> 00:26:38.005 Most breast cancers

NOTE Confidence: 0.99435663

00:26:38.659 --> 00:26:40.520 have low numbers under fifty.

NOTE Confidence: 0.9246885

00:26:42.260 --> 00:26:43.779 And then depending on that

NOTE Confidence: 0.9246885

00:26:43.779 --> 00:26:44.840 recurrent score,

NOTE Confidence: 0.99947506

00:26:45.140 --> 00:26:46.039 we can help

NOTE Confidence: 0.9968605

00:26:46.500 --> 00:26:48.520 decide whether somebody

NOTE Confidence: 0.9968605

00:26:48.580 --> 00:26:50.820 needs chemotherapy or benefits from

NOTE Confidence: 0.9968605

00:26:50.820 --> 00:26:52.980 chemotherapy or really doesn't benefit

NOTE Confidence: 0.9968605

00:26:52.980 --> 00:26:53.799 from chemotherapy.  
NOTE Confidence: 0.9737443

00:26:54.215 --> 00:26:55.095 And a  
NOTE Confidence: 0.9981585

00:26:55.415 --> 00:26:57.095 couple of major studies  
NOTE Confidence: 0.9981585

00:26:57.095 --> 00:26:58.135 that have been published in  
NOTE Confidence: 0.9981585

00:26:58.135 --> 00:26:58.715 the last  
NOTE Confidence: 0.9952032

00:26:59.494 --> 00:27:00.715 five, seven years,  
NOTE Confidence: 0.9996937

00:27:01.815 --> 00:27:03.035 have shown that  
NOTE Confidence: 0.9718616

00:27:03.734 --> 00:27:05.975 oncotype recurrence scores of  
NOTE Confidence: 0.9718616

00:27:05.975 --> 00:27:07.515 twenty five or lower  
NOTE Confidence: 0.9998157

00:27:08.320 --> 00:27:09.619 are not associated  
NOTE Confidence: 0.97133917

00:27:09.920 --> 00:27:11.840 with much benefit to  
NOTE Confidence: 0.97133917

00:27:11.840 --> 00:27:13.359 chemotherapy. There are some caveats  
NOTE Confidence: 0.97133917

00:27:13.359 --> 00:27:14.560 to that. There are  
NOTE Confidence: 0.97133917

00:27:14.560 --> 00:27:15.540 some questions  
NOTE Confidence: 0.9207199

00:27:15.840 --> 00:27:17.540 in young women in particular.  
NOTE Confidence: 0.99872804

00:27:17.840 --> 00:27:19.380 But in most women,

NOTE Confidence: 0.8723794

00:27:19.920 --> 00:27:20.900 low oncotypes,

NOTE Confidence: 0.9977541

00:27:22.645 --> 00:27:23.945 then don't benefit

NOTE Confidence: 0.9668395

00:27:24.325 --> 00:27:26.405 much from chemotherapy, if at

NOTE Confidence: 0.9668395

00:27:26.405 --> 00:27:26.905 all.

NOTE Confidence: 0.9800057

00:27:27.285 --> 00:27:28.885 And it's so different from

NOTE Confidence: 0.9800057

00:27:28.885 --> 00:27:30.005 the way it was thirty

NOTE Confidence: 0.9800057

00:27:30.005 --> 00:27:31.705 years ago where, in fact,

NOTE Confidence: 0.99676

00:27:32.085 --> 00:27:33.605 it was one size fits all.

NOTE Confidence: 0.99676

00:27:33.605 --> 00:27:35.429 Right. And, you know,

NOTE Confidence: 0.99676

00:27:35.429 --> 00:27:37.590 we didn't differentiate between different

NOTE Confidence: 0.99676

00:27:37.590 --> 00:27:39.290 cancers. We gave everybody

NOTE Confidence: 0.92140317

00:27:39.990 --> 00:27:41.609 essentially the same treatment,

NOTE Confidence: 0.9987122

00:27:42.390 --> 00:27:42.890 and

NOTE Confidence: 0.99852836

00:27:43.429 --> 00:27:43.929 it's

NOTE Confidence: 0.9973558

00:27:44.230 --> 00:27:44.730 come

NOTE Confidence: 0.98779726

00:27:45.030 --> 00:27:47.590 so very far. And at  
NOTE Confidence: 0.98779726

00:27:47.590 --> 00:27:48.490 the same time,  
NOTE Confidence: 0.9991568

00:27:49.575 --> 00:27:50.855 not only are we able  
NOTE Confidence: 0.9991568

00:27:50.855 --> 00:27:51.355 to  
NOTE Confidence: 0.9982797

00:27:52.855 --> 00:27:54.135 allow people to live with  
NOTE Confidence: 0.9982797

00:27:54.135 --> 00:27:55.195 fewer side effects,  
NOTE Confidence: 0.993509

00:27:55.815 --> 00:27:56.315 but  
NOTE Confidence: 0.94546086

00:27:56.775 --> 00:27:58.695 we're certainly doing no worse  
NOTE Confidence: 0.94546086

00:27:58.695 --> 00:28:00.215 in terms of overall outcomes.  
NOTE Confidence: 0.94546086

00:28:00.215 --> 00:28:00.715 And  
NOTE Confidence: 0.9611629

00:28:01.415 --> 00:28:02.775 I think just as a  
NOTE Confidence: 0.9611629

00:28:02.775 --> 00:28:03.434 sort of  
NOTE Confidence: 0.989106

00:28:03.930 --> 00:28:05.630 give people a general sense,  
NOTE Confidence: 0.98930514

00:28:06.170 --> 00:28:07.610 what proportion of women who  
NOTE Confidence: 0.98930514

00:28:07.610 --> 00:28:09.450 have breast cancer go on  
NOTE Confidence: 0.98930514

00:28:09.450 --> 00:28:11.369 and live a normal

NOTE Confidence: 0.98930514

00:28:11.369 --> 00:28:12.190 life afterwards?

NOTE Confidence: 0.82744133

00:28:13.130 --> 00:28:14.910 A large proportion,

NOTE Confidence: 0.9321587

00:28:15.369 --> 00:28:17.130 eighty, eighty five percent go

NOTE Confidence: 0.9321587

00:28:17.130 --> 00:28:18.490 on and never

NOTE Confidence: 0.9321587

00:28:18.490 --> 00:28:19.790 hear back from this cancer,

NOTE Confidence: 0.9321587

00:28:19.984 --> 00:28:21.125 from their original cancer.

NOTE Confidence: 0.9970617

00:28:21.425 --> 00:28:22.484 And even women

NOTE Confidence: 0.99685735

00:28:22.865 --> 00:28:23.984 who do hear back from

NOTE Confidence: 0.99685735

00:28:23.984 --> 00:28:24.645 the cancer,

NOTE Confidence: 0.9961996

00:28:25.505 --> 00:28:27.045 whose cancer comes back

NOTE Confidence: 0.93331754

00:28:27.425 --> 00:28:28.545 whether in the breast or

NOTE Confidence: 0.93331754

00:28:28.545 --> 00:28:29.984 somewhere else, go on to

NOTE Confidence: 0.93331754

00:28:29.984 --> 00:28:30.484 live

NOTE Confidence: 0.9559727

00:28:30.785 --> 00:28:32.705 many, many years because of

NOTE Confidence: 0.9559727

00:28:32.705 --> 00:28:33.869 the advances in treatment.

NOTE Confidence: 0.9488589

00:28:34.510 --> 00:28:36.109 Doctor Sarah Schellhorn is an  
NOTE Confidence: 0.9488589

00:28:36.109 --> 00:28:37.790 associate professor of medicine and  
NOTE Confidence: 0.9488589

00:28:37.790 --> 00:28:39.390 medical oncology at the Yale  
NOTE Confidence: 0.9488589

00:28:39.390 --> 00:28:40.370 School of Medicine.  
NOTE Confidence: 0.9671303

00:28:40.910 --> 00:28:42.190 If you have questions, the  
NOTE Confidence: 0.9671303

00:28:42.190 --> 00:28:43.250 address is canceranswersyale  
NOTE Confidence: 0.92269415

00:28:44.110 --> 00:28:46.190 dot edu, and past editions  
NOTE Confidence: 0.92269415

00:28:46.190 --> 00:28:47.725 of the program are available  
NOTE Confidence: 0.92269415

00:28:47.725 --> 00:28:49.164 in audio and written form  
NOTE Confidence: 0.92269415

00:28:49.164 --> 00:28:50.524 at yale cancer center dot  
NOTE Confidence: 0.92269415

00:28:50.524 --> 00:28:51.024 org.  
NOTE Confidence: 0.98670334

00:28:51.325 --> 00:28:52.284 We hope you'll join us  
NOTE Confidence: 0.98670334

00:28:52.284 --> 00:28:53.325 next time to learn more  
NOTE Confidence: 0.98670334

00:28:53.325 --> 00:28:54.784 about the fight against cancer.  
NOTE Confidence: 0.94281024

00:28:55.164 --> 00:28:56.764 Funding for Yale Cancer Answers  
NOTE Confidence: 0.94281024

00:28:56.764 --> 00:28:58.524 is provided by Smilow Cancer



NOTE Confidence: 0.94281024

00:28:58.524 --> 00:28:59.024 Hospital.