WEBVTT

NOTE duration:"01:06:12" NOTE recognizability:0.928

NOTE language:en-us

NOTE Confidence: 0.896323206

 $00:00:00.000 \longrightarrow 00:00:03.192$ It's my great pleasure to introduce

NOTE Confidence: 0.896323206

 $00{:}00{:}03.192 \dashrightarrow 00{:}00{:}05.585$ Doctor Fadari for today's Who's

NOTE Confidence: 0.896323206

 $00:00:05.585 \longrightarrow 00:00:07.440$ going to Give us the grand Rounds?

NOTE Confidence: 0.896323206

00:00:07.440 --> 00:00:10.320 He's Professor of Pathology and Chief

NOTE Confidence: 0.896323206

00:00:10.320 --> 00:00:13.515 of Anatomic Pathology at University of

NOTE Confidence: 0.896323206

00:00:13.515 --> 00:00:16.440 California San Diego Health System,

NOTE Confidence: 0.896323206

00:00:16.440 --> 00:00:19.177 and he received his MD degree from

NOTE Confidence: 0.896323206

00:00:19.177 --> 00:00:21.124 Harvard University, Washington, DC,

NOTE Confidence: 0.896323206

 $00:00:21.124 \longrightarrow 00:00:24.616$ followed by residency in anatomic and

NOTE Confidence: 0.896323206

 $00:00:24.616 \longrightarrow 00:00:27.399$ clinical pathology at Yale University.

NOTE Confidence: 0.896323206

 $00{:}00{:}27.400 \dashrightarrow 00{:}00{:}29.416$ He then completed his fellowship in

NOTE Confidence: 0.896323206

00:00:29.416 --> 00:00:31.498 breast and. Gynecologic pathology,

NOTE Confidence: 0.896323206

00:00:31.498 --> 00:00:35.798 also at Yale and his clinical and

 $00:00:35.798 \longrightarrow 00:00:37.986$ Consultation practice is focused

NOTE Confidence: 0.896323206

 $00{:}00{:}37.986 \dashrightarrow 00{:}00{:}40.688$ on gynecologic and breast cancers.

NOTE Confidence: 0.896323206

 $00:00:40.690 \longrightarrow 00:00:44.128$ He is lectured widely on these

NOTE Confidence: 0.896323206

 $00:00:44.128 \longrightarrow 00:00:45.847$ and related topics.

NOTE Confidence: 0.896323206

00:00:45.850 --> 00:00:47.822 He has authored, coauthored,

NOTE Confidence: 0.896323206

00:00:47.822 --> 00:00:52.770 and edited over 230 papers and five books,

NOTE Confidence: 0.896323206

00:00:52.770 --> 00:00:56.226 predominantly in gynecological pathology.

NOTE Confidence: 0.896323206

 $00:00:56.226 \longrightarrow 00:00:59.070$ And he is.

NOTE Confidence: 0.896323206

 $00:00:59.070 \longrightarrow 00:01:03.370$ Serves on the editorial board of several

NOTE Confidence: 0.896323206

 $00:01:03.370 \longrightarrow 00:01:05.550$ leading prestigious pathology journals,

NOTE Confidence: 0.896323206

 $00{:}01{:}05.550 \dashrightarrow 00{:}01{:}08.002$ which include Modern Pathology,

NOTE Confidence: 0.896323206

00:01:08.002 --> 00:01:09.228 Human Pathology,

NOTE Confidence: 0.896323206

00:01:09.230 --> 00:01:12.386 Archives of Pathology in Laboratory Medicine,

NOTE Confidence: 0.896323206

 $00{:}01{:}12.390 \dashrightarrow 00{:}01{:}13.974$ International Journal of

NOTE Confidence: 0.896323206

00:01:13.974 --> 00:01:15.030 Gynecologic Pathology,

NOTE Confidence: 0.896323206

00:01:15.030 --> 00:01:18.306 and American Journal of Clinical Pathology.

 $00:01:18.310 \longrightarrow 00:01:19.510$ He was the 20.

NOTE Confidence: 0.896323206

 $00:01:19.510 \longrightarrow 00:01:22.008$ He was a recipient of the 2018.

NOTE Confidence: 0.896323206

00:01:22.008 --> 00:01:26.894 Arthur Purdist Out Price Without further ado,

NOTE Confidence: 0.896323206

 $00:01:26.900 \longrightarrow 00:01:28.808$ I'll hand over the floor to

NOTE Confidence: 0.896323206

00:01:28.808 --> 00:01:30.780 Doctor Fedore who will talk about

NOTE Confidence: 0.896323206

 $00:01:30.780 \longrightarrow 00:01:32.740$ Volvo's famous cell carcinoma

NOTE Confidence: 0.896323206

00:01:32.740 --> 00:01:34.700 and putative precursor lesions,

NOTE Confidence: 0.896323206

00:01:34.700 --> 00:01:35.520 historical evolution,

NOTE Confidence: 0.896323206

 $00:01:35.520 \longrightarrow 00:01:37.570$ and recent developments in the

NOTE Confidence: 0.896323206

 $00:01:37.570 \longrightarrow 00:01:39.660$ tale of stasis and progress.

NOTE Confidence: 0.896323206

 $00:01:39.660 \longrightarrow 00:01:41.658$ At the end of the lecture,

NOTE Confidence: 0.896323206

 $00{:}01{:}41.660 \dashrightarrow 00{:}01{:}43.945$ please unmute yourself and ask

NOTE Confidence: 0.896323206

 $00{:}01{:}43.945 \dashrightarrow 00{:}01{:}47.539$ questions or you can post it on the chat.

NOTE Confidence: 0.896323206

00:01:47.540 --> 00:01:47.984 Thank you,

NOTE Confidence: 0.896323206

 $00:01:47.984 \longrightarrow 00:01:48.428$ Doctor Fedore.

 $00:01:48.428 \longrightarrow 00:01:49.538$ I'll hand it to you.

NOTE Confidence: 0.871703007142857

 $00{:}01{:}51.450 \dashrightarrow 00{:}01{:}53.802$ Thank you Doctor Krishnanodi

NOTE Confidence: 0.871703007142857

 $00:01:53.802 \longrightarrow 00:01:55.566$ for that introduction.

NOTE Confidence: 0.871703007142857

00:01:55.570 --> 00:01:57.578 It's really a privilege

NOTE Confidence: 0.871703007142857

 $00:01:57.578 \longrightarrow 00:02:00.088$ to to address y'all today.

NOTE Confidence: 0.871703007142857

 $00:02:00.090 \longrightarrow 00:02:03.040$ I can hardly believe it's been almost 20

NOTE Confidence: 0.871703007142857

00:02:03.040 --> 00:02:05.650 years since I've completed my training,

NOTE Confidence: 0.871703007142857

 $00:02:05.650 \longrightarrow 00:02:10.690$ but that's essentially how it goes.

NOTE Confidence: 0.871703007142857

 $00{:}02{:}10.690 \longrightarrow 00{:}02{:}14.518$ So this presentation is about

NOTE Confidence: 0.871703007142857

 $00:02:14.518 \longrightarrow 00:02:16.159$ Volvo squimmerso carcinomer.

NOTE Confidence: 0.871703007142857

 $00{:}02{:}16.160 \dashrightarrow 00{:}02{:}18.824$ And I will talk about historical

NOTE Confidence: 0.871703007142857

 $00:02:18.824 \longrightarrow 00:02:21.069$ evolution of the precancerous as

NOTE Confidence: 0.871703007142857

 $00:02:21.069 \longrightarrow 00:02:23.039$ well as the cancerous lesions,

NOTE Confidence: 0.871703007142857

 $00:02:23.040 \longrightarrow 00:02:26.112$ as well as pathologic diagnosis and

NOTE Confidence: 0.871703007142857

 $00:02:26.112 \longrightarrow 00:02:29.439$ various other aspects of those lesions.

NOTE Confidence: 0.871703007142857

 $00:02:29.440 \longrightarrow 00:02:32.576$ It is often said that ***** cancer

 $00:02:32.576 \longrightarrow 00:02:37.280$ was initially described in 562AD,

NOTE Confidence: 0.871703007142857

 $00:02:37.280 \longrightarrow 00:02:39.536$ although if you look at works

NOTE Confidence: 0.871703007142857

00:02:39.536 --> 00:02:41.040 of Asus of Amida,

NOTE Confidence: 0.871703007142857

 $00:02:41.040 \longrightarrow 00:02:43.976$ who in his classic work to forbid with.

NOTE Confidence: 0.871703007142857

 $00:02:43.980 \longrightarrow 00:02:46.253$ The last one was focused on **** cancers,

NOTE Confidence: 0.871703007142857

 $00{:}02{:}46.253 \dashrightarrow 00{:}02{:}48.818$ and there were several considerations

NOTE Confidence: 0.871703007142857

 $00:02:48.820 \longrightarrow 00:02:51.724$ of excising ***** cancer and citation

NOTE Confidence: 0.871703007142857

 $00:02:51.724 \longrightarrow 00:02:54.379$ of previous works prior to that.

NOTE Confidence: 0.871703007142857

00:02:54.380 --> 00:02:56.738 In any event, for whatever reason,

NOTE Confidence: 0.871703007142857

 $00:02:56.740 \longrightarrow 00:02:59.550$ there was not a lot written for many,

NOTE Confidence: 0.871703007142857

 $00:02:59.550 \longrightarrow 00:03:01.375$ many years after that documented,

NOTE Confidence: 0.871703007142857

00:03:01.380 --> 00:03:02.940 I should say, for many,

NOTE Confidence: 0.871703007142857

00:03:02.940 --> 00:03:04.508 many years after that.

NOTE Confidence: 0.871703007142857

 $00{:}03{:}04.508 \dashrightarrow 00{:}03{:}06.136$ Indeed, when you look at some of

NOTE Confidence: 0.871703007142857

 $00:03:06.136 \longrightarrow 00:03:07.860$ the earliest works in anatomic pathology,

00:03:07.860 --> 00:03:10.260 including this work by Samuel Gross,

NOTE Confidence: 0.871703007142857

 $00:03:10.260 \longrightarrow 00:03:12.470$ there's no mention whatsoever of.

NOTE Confidence: 0.871703007142857

00:03:12.470 --> 00:03:13.802 ***** all causing numbers.

NOTE Confidence: 0.871703007142857

 $00:03:13.802 \longrightarrow 00:03:16.018$ These are all the ***** diseases

NOTE Confidence: 0.871703007142857

00:03:16.018 --> 00:03:19.306 that were listed in that text.

NOTE Confidence: 0.871703007142857 00:03:19.310 --> 00:03:19.830 However, NOTE Confidence: 0.871703007142857

 $00:03:19.830 \longrightarrow 00:03:23.250$ by the end of the 19th century,

NOTE Confidence: 0.871703007142857

 $00:03:23.250 \longrightarrow 00:03:25.710$ certainly ***** cancer was well established.

NOTE Confidence: 0.871703007142857

 $00:03:25.710 \longrightarrow 00:03:27.750$ So much so that if you look at

NOTE Confidence: 0.871703007142857

00:03:27.750 --> 00:03:29.627 this classic text by James Zenwing,

NOTE Confidence: 0.871703007142857

00:03:29.630 --> 00:03:30.695 the last paragraph,

NOTE Confidence: 0.871703007142857

 $00:03:30.695 \longrightarrow 00:03:33.214$ let's talk about how ***** cancer

NOTE Confidence: 0.871703007142857

 $00:03:33.214 \longrightarrow 00:03:36.190$ usually terminates without operation,

NOTE Confidence: 0.871703007142857

 $00:03:36.190 \longrightarrow 00:03:37.990$ you know, within two years after

NOTE Confidence: 0.871703007142857

 $00:03:37.990 \longrightarrow 00:03:39.190$ discovery of the lesion,

NOTE Confidence: 0.871703007142857 00:03:39.190 --> 00:03:40.330 and indeed.

 $00:03:40.330 \longrightarrow 00:03:44.780$ When you look at some of the early

NOTE Confidence: 0.871703007142857

 $00{:}03{:}44.780 \dashrightarrow 00{:}03{:}47.540$ series or the series that were

NOTE Confidence: 0.871703007142857

 $00:03:47.540 \longrightarrow 00:03:49.827$ published early in the last part of the

NOTE Confidence: 0.871703007142857

00:03:49.827 --> 00:03:51.840 last early part of the last century,

NOTE Confidence: 0.871703007142857

 $00:03:51.840 \longrightarrow 00:03:53.877$ you can see that the cure rates

NOTE Confidence: 0.871703007142857

 $00:03:53.877 \longrightarrow 00:03:55.888$ range from anywhere from 8 to 25%.

NOTE Confidence: 0.871703007142857

 $00:03:55.888 \longrightarrow 00:03:58.160$ It was quite dismal.

NOTE Confidence: 0.871703007142857

 $00{:}03{:}58.160 \dashrightarrow 00{:}04{:}00.240$ Of course, things have changed.

NOTE Confidence: 0.871703007142857

 $00{:}04{:}00.240 \dashrightarrow 00{:}04{:}02.598$ This is global gun data and it

NOTE Confidence: 0.871703007142857

 $00:04:02.598 \longrightarrow 00:04:04.293$ highlights the fact that number

NOTE Confidence: 0.871703007142857

 $00:04:04.293 \longrightarrow 00:04:06.149$ one vulval cancers are uncommon.

NOTE Confidence: 0.871703007142857

 $00:04:06.150 \longrightarrow 00:04:08.172$ But out of 45,000 cases you

NOTE Confidence: 0.871703007142857

 $00{:}04{:}08.172 \dashrightarrow 00{:}04{:}10.046$ can see that 17,000 deaths.

NOTE Confidence: 0.871703007142857

 $00:04:10.046 \longrightarrow 00:04:12.186$ So things have certainly improved

NOTE Confidence: 0.871703007142857

 $00:04:12.186 \longrightarrow 00:04:14.549$ with respect to survival rates as

 $00:04:14.549 \longrightarrow 00:04:16.894$ compared to the turn of the last

NOTE Confidence: 0.871703007142857

 $00:04:16.961 \longrightarrow 00:04:18.310$ century in the United States.

NOTE Confidence: 0.871703007142857

 $00:04:18.310 \longrightarrow 00:04:19.986$ You can see that the five year

NOTE Confidence: 0.871703007142857

 $00:04:19.986 \longrightarrow 00:04:21.542$ relative survival for ***** cancer

NOTE Confidence: 0.871703007142857

00:04:21.542 --> 00:04:24.566 is around 7 to 1.1% and that has

NOTE Confidence: 0.871703007142857

 $00:04:24.566 \longrightarrow 00:04:26.990$ remained stable for the most part.

NOTE Confidence: 0.871703007142857

 $00:04:26.990 \longrightarrow 00:04:29.007$ Now the vast majority of ***** cancers

NOTE Confidence: 0.871703007142857

00:04:29.007 --> 00:04:31.492 are are squamous cell carcinomas

NOTE Confidence: 0.871703007142857

 $00:04:31.492 \longrightarrow 00:04:34.862$ more than 90% and so I would.

NOTE Confidence: 0.871703007142857

 $00:04:34.862 \longrightarrow 00:04:36.734$ Discussed 6 discrete things.

NOTE Confidence: 0.871703007142857

 $00:04:36.740 \longrightarrow 00:04:39.008$ A lot of these are controversial

NOTE Confidence: 0.871703007142857

 $00:04:39.008 \longrightarrow 00:04:41.948$ in some way or there's some

NOTE Confidence: 0.871703007142857

 $00:04:41.948 \longrightarrow 00:04:44.060$ disagreement in some way about them.

NOTE Confidence: 0.871703007142857

 $00:04:44.060 \longrightarrow 00:04:46.580$ And so I'll just kind of

NOTE Confidence: 0.871703007142857

 $00:04:46.580 \longrightarrow 00:04:49.140$ explore some of this items,

NOTE Confidence: 0.871703007142857

 $00:04:49.140 \longrightarrow 00:04:51.780$ including their pathology,

 $00:04:51.780 \longrightarrow 00:04:54.060$ the basic pathology,

NOTE Confidence: 0.871703007142857

 $00:04:54.060 \longrightarrow 00:04:57.378$ the first relates to HVV status,

NOTE Confidence: 0.871703007142857

 $00:04:57.380 \longrightarrow 00:05:02.450$ this meta analysis of over 8000 patients.

NOTE Confidence: 0.871703007142857

 $00:05:02.450 \longrightarrow 00:05:05.270$ And numerous dozens of studies show

NOTE Confidence: 0.871703007142857

 $00:05:05.270 \longrightarrow 00:05:08.271$ that the group prevalence of HPV

NOTE Confidence: 0.871703007142857

 $00:05:08.271 \longrightarrow 00:05:10.781$ positivity and all the squamous

NOTE Confidence: 0.871703007142857

 $00:05:10.781 \longrightarrow 00:05:13.233$ cell carcinoma is around 39.1%,

NOTE Confidence: 0.871703007142857

 $00{:}05{:}13.233 \dashrightarrow 00{:}05{:}17.211$ those that are assessed by P16

NOTE Confidence: 0.871703007142857

 $00:05:17.211 \longrightarrow 00:05:20.302$ immunostochemistry that is around 34.1%.

NOTE Confidence: 0.871703007142857

 $00:05:20.302 \longrightarrow 00:05:22.534$ And the best data on the

NOTE Confidence: 0.871703007142857

00:05:22.534 --> 00:05:24.246 significance of HPV positivity

NOTE Confidence: 0.871703007142857

 $00:05:24.246 \longrightarrow 00:05:26.836$ also comes from a metaanalysis

NOTE Confidence: 0.871703007142857

 $00{:}05{:}26.836 \dashrightarrow 00{:}05{:}28.908$ wherein the authors concluded

NOTE Confidence: 0.924872583333333

 $00{:}05{:}28.986 \dashrightarrow 00{:}05{:}32.199$ that woman with HPV positive vulval cancers.

NOTE Confidence: 0.924872583333333

 $00:05:32.200 \longrightarrow 00:05:35.798$ Have superior survival when compared to those

00:05:35.798 --> 00:05:40.346 that are HPV negative with H R's 0.61 and

NOTE Confidence: 0.924872583333333

 $00:05:40.346 \longrightarrow 00:05:43.832 \ 0.75$ for five years OS&DFS respectively.

NOTE Confidence: 0.9248725833333333

 $00:05:43.832 \longrightarrow 00:05:46.928$ However, when you look at more

NOTE Confidence: 0.924872583333333

 $00:05:46.928 \longrightarrow 00:05:48.893$ recent studies, this is studies

NOTE Confidence: 0.924872583333333

 $00:05:48.893 \longrightarrow 00:05:50.759$ published in the last 10 years,

NOTE Confidence: 0.924872583333333

 $00:05:50.760 \longrightarrow 00:05:53.480$ the picture becomes a little bit more murky.

NOTE Confidence: 0.924872583333333

00:05:53.480 --> 00:05:55.958 You can see here that most studies,

NOTE Confidence: 0.924872583333333

 $00:05:55.960 \longrightarrow 00:05:57.724$ about 61% of studies,

NOTE Confidence: 0.924872583333333

00:05:57.724 --> 00:05:59.929 have not found HPV positivity.

NOTE Confidence: 0.924872583333333

 $00:05:59.930 \longrightarrow 00:06:04.820$ To be associated with better to be to be

NOTE Confidence: 0.924872583333333

 $00{:}06{:}04.820 \dashrightarrow 00{:}06{:}06.645$ associated with better overall survival.

NOTE Confidence: 0.924872583333333

 $00:06:06.650 \longrightarrow 00:06:08.564$ And most studies have found it

NOTE Confidence: 0.924872583333333

 $00{:}06{:}08.564 \dashrightarrow 00{:}06{:}10.410$ to be associated with better

NOTE Confidence: 0.9248725833333333

 $00:06:10.410 \longrightarrow 00:06:11.928$ progression free survival.

NOTE Confidence: 0.924872583333333

 $00:06:11.930 \longrightarrow 00:06:13.526$ But even by those two measures,

NOTE Confidence: 0.924872583333333

 $00:06:13.530 \longrightarrow 00:06:16.302$ you can see that there's sizable minorities

00:06:16.302 --> 00:06:19.167 of studies that have found the opposite,

NOTE Confidence: 0.924872583333333

 $00:06:19.170 \longrightarrow 00:06:20.448$ something like 40%.

NOTE Confidence: 0.924872583333333

00:06:20.448 --> 00:06:22.578 At the University of California,

NOTE Confidence: 0.924872583333333 $00:06:22.580 \longrightarrow 00:06:24.420$ San Diego, NOTE Confidence: 0.924872583333333

00:06:24.420 --> 00:06:27.132 our data falls into that minority

NOTE Confidence: 0.924872583333333

00:06:27.132 --> 00:06:29.473 where HPV positive patients do

NOTE Confidence: 0.924872583333333

00:06:29.473 --> 00:06:32.185 much better than HPV negative case

NOTE Confidence: 0.924872583333333

 $00:06:32.185 \longrightarrow 00:06:34.659$ patients independent of other factors.

NOTE Confidence: 0.924872583333333

 $00{:}06{:}34.660 \dashrightarrow 00{:}06{:}36.675$ If you synthesize everything that's

NOTE Confidence: 0.924872583333333

 $00{:}06{:}36.675 \dashrightarrow 00{:}06{:}38.690$ been published in the literature

NOTE Confidence: 0.924872583333333

00:06:38.752 --> 00:06:39.820 on HPV positivity,

NOTE Confidence: 0.924872583333333

 $00:06:39.820 \longrightarrow 00:06:42.865$ you find out this patients are generally

NOTE Confidence: 0.924872583333333

 $00{:}06{:}42.865 \to 00{:}06{:}45.028$ younger, the tumors are smaller,

NOTE Confidence: 0.924872583333333

00:06:45.028 --> 00:06:46.324 they associated with.

NOTE Confidence: 0.924872583333333

 $00:06:46.330 \longrightarrow 00:06:48.218$ Lower depths of struggle,

 $00:06:48.218 \longrightarrow 00:06:48.690$ invasion,

NOTE Confidence: 0.924872583333333

 $00{:}06{:}48.690 \dashrightarrow 00{:}06{:}50.650$ less frequent lymph node metastasis,

NOTE Confidence: 0.924872583333333

 $00:06:50.650 \longrightarrow 00:06:52.106$ less frequent margin positivity.

NOTE Confidence: 0.924872583333333

 $00:06:52.106 \longrightarrow 00:06:54.290$ And at least three studies have

NOTE Confidence: 0.924872583333333

 $00:06:54.348 \longrightarrow 00:06:55.958$ found that for those patients

NOTE Confidence: 0.924872583333333

 $00{:}06{:}55.958 \dashrightarrow 00{:}06{:}57.725$ that are treated with primary

NOTE Confidence: 0.924872583333333

 $00:06:57.725 \longrightarrow 00:07:00.100$ radiation or chemo radiation that

NOTE Confidence: 0.924872583333333

 $00:07:00.100 \longrightarrow 00:07:01.525$ there's greater responsiveness.

NOTE Confidence: 0.9248725833333333

 $00:07:01.530 \longrightarrow 00:07:03.954$ So there seems to be greater

NOTE Confidence: 0.924872583333333

 $00:07:03.954 \longrightarrow 00:07:06.063$ responsiveness amongst the HPV

NOTE Confidence: 0.9248725833333333

 $00{:}07{:}06.063 \dashrightarrow 00{:}07{:}09.534$ positive group if you compare HPV

NOTE Confidence: 0.924872583333333

 $00:07:09.534 \longrightarrow 00:07:12.060$ positive and HPV negative cases with

NOTE Confidence: 0.924872583333333

 $00:07:12.137 \longrightarrow 00:07:14.967$ respect to their mutational profiles.

NOTE Confidence: 0.924872583333333 00:07:14.970 --> 00:07:16.394 It's just,

NOTE Confidence: 0.924872583333333

00:07:16.394 --> 00:07:17.818 you know.

NOTE Confidence: 0.924872583333333

 $00:07:17.820 \longrightarrow 00:07:20.400$ 19HP V positive cases exposed to

 $00{:}07{:}20.400 \longrightarrow 00{:}07{:}23.224$ the clinical NGS panel which oped

NOTE Confidence: 0.924872583333333

 $00:07:23.224 \longrightarrow 00:07:26.170$ another nine institution has 397 genes

NOTE Confidence: 0.924872583333333

 $00:07:26.170 \longrightarrow 00:07:29.355$ and and these are just the genes

NOTE Confidence: 0.924872583333333

 $00:07:29.355 \longrightarrow 00:07:32.819$ that show statistically significant

NOTE Confidence: 0.924872583333333

 $00:07:32.820 \longrightarrow 00:07:34.800$ differences between the HPV positive

NOTE Confidence: 0.924872583333333

 $00:07:34.800 \longrightarrow 00:07:37.196$ and HPV negative group and are

NOTE Confidence: 0.924872583333333

 $00:07:37.196 \longrightarrow 00:07:39.296$ more prevalent in the HPV positive.

NOTE Confidence: 0.924872583333333

 $00{:}07{:}39.300 --> 00{:}07{:}41.610$ You can see that number one

NOTE Confidence: 0.924872583333333

 $00:07:41.610 \longrightarrow 00:07:43.150$ even the highest mutation.

NOTE Confidence: 0.924872583333333

00:07:43.150 --> 00:07:45.196 Which is like 3C A it's only 28%

NOTE Confidence: 0.924872583333333

00:07:45.196 --> 00:07:47.226 and everything else is lower,

NOTE Confidence: 0.924872583333333

 $00:07:47.230 \longrightarrow 00:07:49.449$ but these are only the ones that

NOTE Confidence: 0.924872583333333

 $00{:}07{:}49.449 \dashrightarrow 00{:}07{:}50.400$ show significant differences

NOTE Confidence: 0.924872583333333

 $00:07:50.456 \longrightarrow 00:07:52.142$ between them and are more common

NOTE Confidence: 0.924872583333333

00:07:52.142 --> 00:07:53.630 than the HPV positive group.

 $00:07:53.630 \longrightarrow 00:07:56.040$ Amongst the HPV negative group

NOTE Confidence: 0.924872583333333

 $00{:}07{:}56.040 \dashrightarrow 00{:}07{:}58.450$ however then several genes that

NOTE Confidence: 0.924872583333333

 $00:07:58.531 \longrightarrow 00:08:01.086$ with high mutation of frequencies

NOTE Confidence: 0.924872583333333

 $00:08:01.086 \longrightarrow 00:08:04.633$ most notably CP53 and CDK and 2A

NOTE Confidence: 0.924872583333333

 $00{:}08{:}04.633 \dashrightarrow 00{:}08{:}07.074$ as well as term P and these are

NOTE Confidence: 0.924872583333333

00:08:07.074 --> 00:08:09.468 seen at very high frequencies more

NOTE Confidence: 0.924872583333333

 $00:08:09.468 \longrightarrow 00:08:12.148$ commonly in the HPV negative group.

NOTE Confidence: 0.941801815384615

 $00:08:14.170 \longrightarrow 00:08:16.466$ When we look at all prior studies

NOTE Confidence: 0.941801815384615

 $00:08:16.466 \longrightarrow 00:08:18.569$ that have looked at the question,

NOTE Confidence: 0.941801815384615

 $00:08:18.570 \longrightarrow 00:08:20.410$ we did this in 2021,

NOTE Confidence: 0.941801815384615

 $00:08:20.410 \longrightarrow 00:08:21.866$ 2020 something like that.

NOTE Confidence: 0.941801815384615

 $00:08:21.866 \longrightarrow 00:08:24.050$ You can see it's pretty consistent.

NOTE Confidence: 0.941801815384615

 $00:08:24.050 \longrightarrow 00:08:26.794$ Each bar represents a study that have

NOTE Confidence: 0.941801815384615

 $00:08:26.794 \longrightarrow 00:08:31.065$ looked at the issue and it's you know TP53

NOTE Confidence: 0.941801815384615

00:08:31.065 --> 00:08:33.690 tends to be the most common mutation.

NOTE Confidence: 0.941801815384615

 $00:08:33.690 \longrightarrow 00:08:36.042$ That have been identified in the HPV

 $00:08:36.042 \longrightarrow 00:08:38.407$ negative group which is in the upper graph.

NOTE Confidence: 0.941801815384615

 $00:08:38.410 \longrightarrow 00:08:40.458$ That's compared to the ones in the lower

NOTE Confidence: 0.941801815384615

 $00{:}08{:}40.458 \dashrightarrow 00{:}08{:}42.647$ where it tends to be more heterogeneous,

NOTE Confidence: 0.941801815384615

 $00:08:42.650 \longrightarrow 00:08:44.434$ the HPV positive tumors.

NOTE Confidence: 0.941801815384615

 $00:08:44.434 \longrightarrow 00:08:47.110$ The mutational profile tends to be

NOTE Confidence: 0.941801815384615

00:08:47.188 --> 00:08:49.973 monitor genius without anyone really

NOTE Confidence: 0.941801815384615

 $00:08:49.973 \longrightarrow 00:08:53.342$ being overtly dominant the way P53

NOTE Confidence: 0.941801815384615

 $00:08:53.342 \longrightarrow 00:08:56.726$ does in the HPV negative group.

NOTE Confidence: 0.941801815384615

00:08:56.730 --> 00:09:00.072 The P53 being dominant in the HPV negative

NOTE Confidence: 0.941801815384615

 $00:09:00.072 \longrightarrow 00:09:02.427$ group also has significance clinically.

NOTE Confidence: 0.941801815384615

 $00:09:02.430 \longrightarrow 00:09:04.002$ You can see the green line

NOTE Confidence: 0.941801815384615

00:09:04.002 --> 00:09:05.390 represents the HPV positive group,

NOTE Confidence: 0.941801815384615

 $00:09:05.390 \longrightarrow 00:09:06.872$ patients do better.

NOTE Confidence: 0.941801815384615

 $00:09:06.872 \dashrightarrow 00:09:10.330$ The red line represents the HPV negative

NOTE Confidence: 0.941801815384615

00:09:10.418 --> 00:09:12.950 group that are also P53 mutant.

 $00:09:12.950 \longrightarrow 00:09:15.008$ And you can see that there's an

NOTE Confidence: 0.941801815384615

 $00:09:15.008 \longrightarrow 00:09:16.775$ intermediate group where there's HPV

NOTE Confidence: 0.941801815384615

 $00:09:16.775 \longrightarrow 00:09:20.030$ negative or P53 wild type and those

NOTE Confidence: 0.941801815384615

 $00:09:20.030 \longrightarrow 00:09:23.069$ patients have intermediate prognosis.

NOTE Confidence: 0.941801815384615

 $00:09:23.070 \longrightarrow 00:09:24.801$ The notion that.

NOTE Confidence: 0.941801815384615

 $00:09:24.801 \longrightarrow 00:09:27.686$ P53 alterations is associated with

NOTE Confidence: 0.941801815384615

00:09:27.686 --> 00:09:30.190 ***** cancer was initially reported

NOTE Confidence: 0.941801815384615

 $00:09:30.190 \longrightarrow 00:09:33.184$ by Pellodian colleagues in 1993

NOTE Confidence: 0.941801815384615

 $00:09:33.184 \longrightarrow 00:09:37.310$ and it was a small study.

NOTE Confidence: 0.941801815384615

 $00:09:37.310 \longrightarrow 00:09:38.990$ It was a letter to the editor,

NOTE Confidence: 0.941801815384615

 $00:09:38.990 \longrightarrow 00:09:41.174$ but they established that the mutations

NOTE Confidence: 0.941801815384615

 $00:09:41.174 \longrightarrow 00:09:43.681$ were also demonstrable and correlated with

NOTE Confidence: 0.941801815384615

 $00:09:43.681 \longrightarrow 00:09:45.665$ immunistic chemical staining patterns.

NOTE Confidence: 0.941801815384615 00:09:45.670 --> 00:09:46.310 Of course,

NOTE Confidence: 0.941801815384615

 $00:09:46.310 \longrightarrow 00:09:47.270$ there've been dozens,

NOTE Confidence: 0.941801815384615

 $00:09:47.270 \longrightarrow 00:09:49.670$ probably hundreds of studies after that.

 $00:09:49.670 \longrightarrow 00:09:52.334$ So much so now that we now have.

NOTE Confidence: 0.941801815384615

 $00:09:52.340 \longrightarrow 00:09:54.330$ Sort of well established staining

NOTE Confidence: 0.941801815384615

 $00{:}09{:}54.330 \dashrightarrow 00{:}09{:}56.320$ patterns that correlate with the

NOTE Confidence: 0.941801815384615

 $00:09:56.386 \longrightarrow 00:09:58.496$ presence of an underlying mutation.

NOTE Confidence: 0.941801815384615

 $00:09:58.500 \longrightarrow 00:09:59.960$ The mutational patterns are

NOTE Confidence: 0.941801815384615

 $00:09:59.960 \longrightarrow 00:10:02.251$ shown on the left, on the right,

NOTE Confidence: 0.941801815384615

 $00:10:02.251 \longrightarrow 00:10:04.190$ and this is based on work by

NOTE Confidence: 0.941801815384615

 $00:10:04.256 \longrightarrow 00:10:06.356$ Tecia Klute and colleagues from

NOTE Confidence: 0.941801815384615

 $00{:}10{:}06.356 \dashrightarrow 00{:}10{:}08.484$ the Vancouver group And you can

NOTE Confidence: 0.941801815384615

 $00{:}10{:}08.484 \dashrightarrow 00{:}10{:}10.500$ see that you know the most common

NOTE Confidence: 0.941801815384615

 $00:10:10.567 \longrightarrow 00:10:12.952$ staining pattern is this parabasal

NOTE Confidence: 0.941801815384615

 $00{:}10{:}12.952 \dashrightarrow 00{:}10{:}14.860$ diffuse over expression pattern.

NOTE Confidence: 0.941801815384615

 $00{:}10{:}14.860 \dashrightarrow 00{:}10{:}17.716$ You could also have just staining of the

NOTE Confidence: 0.941801815384615

 $00{:}10{:}17.716 \dashrightarrow 00{:}10{:}20.118$ basal layers or nulls or cytoplasmic.

NOTE Confidence: 0.941801815384615

 $00:10:20.120 \longrightarrow 00:10:22.286$ In the wild type staining patterns

 $00:10:22.286 \longrightarrow 00:10:24.413$ you have no staining of the

NOTE Confidence: 0.941801815384615

00:10:24.413 --> 00:10:26.237 base and some lesions we have,

NOTE Confidence: 0.941801815384615

 $00:10:26.240 \longrightarrow 00:10:27.920$ even though they may be staining in

NOTE Confidence: 0.941801815384615

 $00:10:27.920 \longrightarrow 00:10:30.628$ the middle or just scattered sporadic

NOTE Confidence: 0.941801815384615

 $00:10:30.628 \longrightarrow 00:10:34.480$ staining of individual cells within the nest.

NOTE Confidence: 0.941801815384615

 $00:10:34.480 \longrightarrow 00:10:37.763$ When that model was applied to an

NOTE Confidence: 0.941801815384615

00:10:37.763 --> 00:10:40.071 independent cohort of over 400

NOTE Confidence: 0.941801815384615

00:10:40.071 --> 00:10:41.484 HPV negative cases,

NOTE Confidence: 0.941801815384615

 $00{:}10{:}41.484 \dashrightarrow 00{:}10{:}44.310$ the parabasal diffuse expression pattern was

NOTE Confidence: 0.941801815384615

 $00:10:44.387 \longrightarrow 00:10:47.435$ the most commonly observed staining pattern.

NOTE Confidence: 0.941801815384615

 $00{:}10{:}47.440 \dashrightarrow 00{:}10{:}50.028$ When I saw the wild type, it's the

NOTE Confidence: 0.941801815384615

 $00:10:50.028 \longrightarrow 00:10:52.198$ scattered isolated cells being positive.

NOTE Confidence: 0.941801815384615

 $00:10:52.200 \longrightarrow 00:10:53.620$ So here's some images that

NOTE Confidence: 0.941801815384615

 $00:10:53.620 \longrightarrow 00:10:55.040$ I just took for this.

NOTE Confidence: 0.941801815384615

 $00:10:55.040 \longrightarrow 00:10:57.456$ You can see in the top image.

NOTE Confidence: 0.941801815384615

 $00{:}10{:}57.456 \dashrightarrow 00{:}11{:}00.170$ On initial inspection, it may look like it's.

00:11:00.170 --> 00:11:02.490 HPV mutational type staining pattern,

NOTE Confidence: 0.941801815384615

 $00:11:02.490 \longrightarrow 00:11:04.938$ but in fact the basal layer is not

NOTE Confidence: 0.941801815384615

00:11:04.938 --> 00:11:06.887 staining so it's P53 wild type.

NOTE Confidence: 0.941801815384615

 $00:11:06.890 \longrightarrow 00:11:08.661$ Whereas on the bottom it looks like

NOTE Confidence: 0.941801815384615

00:11:08.661 --> 00:11:10.131 the central portion is not staining

NOTE Confidence: 0.941801815384615

 $00:11:10.131 \longrightarrow 00:11:11.678$ but the base is staining and all

NOTE Confidence: 0.941801815384615

 $00:11:11.725 \longrightarrow 00:11:13.285$ the cells in between are staining.

NOTE Confidence: 0.941801815384615

 $00:11:13.290 \longrightarrow 00:11:16.650$ So this is a mutational staining pattern.

NOTE Confidence: 0.941801815384615

 $00{:}11{:}16.650 \dashrightarrow 00{:}11{:}19.375$ Overall HPV status is recognized

NOTE Confidence: 0.941801815384615

 $00:11:19.375 \longrightarrow 00:11:21.010$ to be significant,

NOTE Confidence: 0.941801815384615

 $00:11:21.010 \longrightarrow 00:11:22.978$ but it's not a clinical decision

NOTE Confidence: 0.941801815384615

 $00:11:22.978 \longrightarrow 00:11:24.290$ point at present time.

NOTE Confidence: 0.941801815384615

 $00{:}11{:}24.290 \dashrightarrow 00{:}11{:}26.708$ The Who 5th edition does recommend.

NOTE Confidence: 0.941801815384615

 $00:11:26.710 \longrightarrow 00:11:29.110$ That tumors be classified based

NOTE Confidence: 0.941801815384615

 $00:11:29.110 \longrightarrow 00:11:32.050$ on the HPV status and the cops.

00:11:32.050 --> 00:11:33.070 Synoptic Report template,

NOTE Confidence: 0.947441742857143

 $00:11:33.070 \longrightarrow 00:11:35.650$ which Doctor Chris Minoli

NOTE Confidence: 0.947441742857143

00:11:35.650 --> 00:11:40.526 Spences and I CCR guidelines all

NOTE Confidence: 0.947441742857143

00:11:40.526 --> 00:11:42.350 follow The Who classification,

NOTE Confidence: 0.947441742857143

 $00:11:42.350 \longrightarrow 00:11:45.630$ and Figo 2021 does the same as well.

NOTE Confidence: 0.907416818333333

 $00:11:48.270 \longrightarrow 00:11:51.567$ The next is the question of tomorrow's

NOTE Confidence: 0.907416818333333

 $00:11:51.567 \longrightarrow 00:11:54.240$ subtyping in squamous cell carcinoma.

NOTE Confidence: 0.907416818333333

 $00:11:54.240 \longrightarrow 00:11:56.110$ Here are the various classifications

NOTE Confidence: 0.907416818333333

00:11:56.110 --> 00:11:58.913 over the years of the various subtypes

NOTE Confidence: 0.907416818333333

00:11:58.913 --> 00:12:01.298 of squamous cell carcinoma and you

NOTE Confidence: 0.907416818333333

 $00{:}12{:}01.298 \mathrel{--}{>} 00{:}12{:}03.042$ can see it all depends on what a

NOTE Confidence: 0.907416818333333

 $00:12:03.042 \longrightarrow 00:12:04.519$ particular author wants to emphasize.

NOTE Confidence: 0.907416818333333

 $00:12:04.520 \longrightarrow 00:12:07.400$ What The sense you do get is that,

NOTE Confidence: 0.907416818333333

00:12:07.400 --> 00:12:09.280 and also from my experiences,

NOTE Confidence: 0.907416818333333

 $00:12:09.280 \longrightarrow 00:12:12.450$ is that the same spectrum of subtypes

NOTE Confidence: 0.907416818333333

 $00{:}12{:}12.450 \dashrightarrow 00{:}12{:}14.770$ that you see in the skin and elsewhere

 $00:12:14.770 \longrightarrow 00:12:16.596$ can also be seen in the *****.

NOTE Confidence: 0.907416818333333

 $00:12:16.600 \longrightarrow 00:12:19.876$ Right now, HPV positivity versus negativity

NOTE Confidence: 0.907416818333333

 $00{:}12{:}19.876 \dashrightarrow 00{:}12{:}22.690$ is the main classification factor.

NOTE Confidence: 0.907416818333333

 $00:12:22.690 \longrightarrow 00:12:25.210$ And what we know is that the spindle cell

NOTE Confidence: 0.907416818333333

 $00:12:25.210 \longrightarrow 00:12:30.369$ and the verrucas are typically HPV negative.

NOTE Confidence: 0.907416818333333

 $00:12:30.370 \longrightarrow 00:12:33.079$ Everything else can be seen in either

NOTE Confidence: 0.907416818333333

00:12:33.079 --> 00:12:35.967 the HPV positive or HPV negative groups.

NOTE Confidence: 0.907416818333333

 $00{:}12{:}35.970 \dashrightarrow 00{:}12{:}38.592$ The idea that subtyping relates to

NOTE Confidence: 0.907416818333333

 $00:12:38.592 \longrightarrow 00:12:41.237$ HPV status was initially proffered by

NOTE Confidence: 0.907416818333333

 $00:12:41.237 \longrightarrow 00:12:44.114$ Turkey and Kerman in the early 1990s.

NOTE Confidence: 0.907416818333333

 $00:12:44.120 \longrightarrow 00:12:46.334$ Where they reported that the basiloid

NOTE Confidence: 0.907416818333333

 $00:12:46.334 \longrightarrow 00:12:48.508$ and warty morphology were more frequently

NOTE Confidence: 0.907416818333333

 $00{:}12{:}48.508 \dashrightarrow 00{:}12{:}51.036$ seen in the HPV positive group and the

NOTE Confidence: 0.907416818333333

 $00:12:51.104 \longrightarrow 00:12:53.445$ HPV the caratinizing morphology was more

NOTE Confidence: 0.907416818333333

 $00:12:53.445 \longrightarrow 00:12:56.719$ frequently seen in the HPV negative group.

 $00:12:56.720 \longrightarrow 00:12:59.016$ So here for example is the caratinizing

NOTE Confidence: 0.907416818333333

00:12:59.016 --> 00:13:01.219 squamous cell carcinoma and you can see

NOTE Confidence: 0.907416818333333

 $00:13:01.219 \longrightarrow 00:13:02.965$ that it's basically the three mutational

NOTE Confidence: 0.907416818333333

 $00:13:03.026 \longrightarrow 00:13:05.254$ type staining pattern or supposed to

NOTE Confidence: 0.907416818333333

 $00:13:05.254 \longrightarrow 00:13:08.356$ this one which is basiloid and it's P

NOTE Confidence: 0.907416818333333

00:13:08.356 --> 00:13:10.953 16 positive HPV associated or this one

NOTE Confidence: 0.907416818333333

 $00:13:10.953 \longrightarrow 00:13:13.819$ which is wordy and is similarly HPV.

NOTE Confidence: 0.907416818333333

00:13:13.820 --> 00:13:15.600 Associated however, this one,

NOTE Confidence: 0.907416818333333

 $00:13:15.600 \longrightarrow 00:13:18.270$ which is also which also has

NOTE Confidence: 0.907416818333333

00:13:18.354 --> 00:13:21.988 warty morphology, is HPV negative,

NOTE Confidence: 0.907416818333333

 $00{:}13{:}21.988 \dashrightarrow 00{:}13{:}23.540$ P16 negative.

NOTE Confidence: 0.907416818333333

 $00:13:23.540 \longrightarrow 00:13:25.655$ Now I specifically illustrated this

NOTE Confidence: 0.907416818333333

 $00{:}13{:}25.655 \dashrightarrow 00{:}13{:}28.313$ case to highlight the the notion

NOTE Confidence: 0.907416818333333

00:13:28.313 --> 00:13:31.139 that HPV status cannot be reliably

NOTE Confidence: 0.907416818333333

 $00:13:31.139 \longrightarrow 00:13:33.059$ predicted from morphologic evaluation

NOTE Confidence: 0.907416818333333

 $00:13:33.059 \longrightarrow 00:13:34.779$ only if for example,

 $00:13:34.780 \longrightarrow 00:13:36.435$ is the keratinize and squintin

NOTE Confidence: 0.907416818333333

 $00:13:36.435 \longrightarrow 00:13:38.401$ cell carcinoma and you can clearly

NOTE Confidence: 0.907416818333333

 $00:13:38.401 \longrightarrow 00:13:40.390$ see that it's P 16 positive.

NOTE Confidence: 0.907416818333333 00:13:40.390 --> 00:13:41.120 Indeed, NOTE Confidence: 0.907416818333333

 $00:13:41.120 \longrightarrow 00:13:45.500$ the largest studies on the subject

NOTE Confidence: 0.907416818333333

 $00:13:45.500 \longrightarrow 00:13:46.828$ have found the same.

NOTE Confidence: 0.907416818333333

 $00:13:46.828 \longrightarrow 00:13:48.820$ This is from the Mobile vaginal

NOTE Confidence: 0.907416818333333

 $00:13:48.820 \longrightarrow 00:13:51.352$ study group which is only already

NOTE Confidence: 0.907416818333333

00:13:51.352 --> 00:13:52.618 in Natalia Brakislova,

NOTE Confidence: 0.907416818333333

 $00:13:52.620 \longrightarrow 00:13:55.770$ and you can see here that the

NOTE Confidence: 0.907416818333333

 $00{:}13{:}55.770 \dashrightarrow 00{:}13{:}57.580~\mathrm{HPV}$ positive column here

NOTE Confidence: 0.911397074545454

00:13:59.620 --> 00:14:01.625 36.5% of cases are characterizing

NOTE Confidence: 0.911397074545454

 $00{:}14{:}01.625 \dashrightarrow 00{:}14{:}04.060$ out of the HPV positive cases

NOTE Confidence: 0.911397074545454

00:14:04.060 --> 00:14:06.136 and out of the HPV negative.

NOTE Confidence: 0.911397074545454

 $00:14:06.140 \longrightarrow 00:14:08.312$ Smaller subset, but still.

 $00:14:08.312 \longrightarrow 00:14:12.080$ Around 5% are either basiloid or worthy,

NOTE Confidence: 0.911397074545454

 $00:14:12.080 \longrightarrow 00:14:13.896$ so clearly additional testing

NOTE Confidence: 0.911397074545454

 $00:14:13.896 \longrightarrow 00:14:17.040$ must be done to establish the HPV

NOTE Confidence: 0.911397074545454

 $00:14:17.040 \longrightarrow 00:14:19.399$ status if one wants to do that.

NOTE Confidence: 0.911397074545454

 $00:14:19.400 \longrightarrow 00:14:21.840$ Now there are various modalities

NOTE Confidence: 0.911397074545454

 $00:14:21.840 \longrightarrow 00:14:23.718$ for those that have been analyzed

NOTE Confidence: 0.911397074545454

 $00{:}14{:}23.718 \dashrightarrow 00{:}14{:}25.906$ using DNA PCR for high risk HPV

NOTE Confidence: 0.911397074545454

00:14:25.906 --> 00:14:28.200 types and P6 animators to chemistry,

NOTE Confidence: 0.911397074545454

 $00:14:28.200 \longrightarrow 00:14:29.800$ there will be a discrepancy

NOTE Confidence: 0.911397074545454

 $00:14:29.800 \longrightarrow 00:14:31.304$ in around 10% of cases.

NOTE Confidence: 0.911397074545454

 $00:14:31.304 \longrightarrow 00:14:32.120$ In other words,

NOTE Confidence: 0.911397074545454

00:14:32.120 --> 00:14:34.724 you'll find one result using one modality

NOTE Confidence: 0.911397074545454

 $00:14:34.724 \longrightarrow 00:14:37.328$ and another result using another modality.

NOTE Confidence: 0.911397074545454

 $00:14:37.330 \longrightarrow 00:14:39.769$ As shown here,

NOTE Confidence: 0.911397074545454

 $00:14:39.770 \longrightarrow 00:14:42.090$ amongst those cases that are

NOTE Confidence: 0.911397074545454

00:14:42.090 --> 00:14:44.410 P16 positive and PCR negative,

 $00:14:44.410 \longrightarrow 00:14:46.420$ they tend to be more clinical

NOTE Confidence: 0.911397074545454

 $00:14:46.420 \longrightarrow 00:14:48.155$ pathologically similar to those that

NOTE Confidence: 0.911397074545454

 $00:14:48.155 \longrightarrow 00:14:49.845$ are positive by both modalities.

NOTE Confidence: 0.911397074545454

 $00:14:49.850 \longrightarrow 00:14:51.314$ In other words,

NOTE Confidence: 0.911397074545454

00:14:51.314 --> 00:14:54.242 they're they have background VIN 3,

NOTE Confidence: 0.911397074545454

 $00:14:54.250 \longrightarrow 00:14:55.678$ they are younger patients,

NOTE Confidence: 0.911397074545454

00:14:55.678 --> 00:14:58.250 maybe they have some warty or visible

NOTE Confidence: 0.911397074545454

 $00:14:58.250 \longrightarrow 00:15:00.065$ or morphology suggesting that the

NOTE Confidence: 0.911397074545454

 $00:15:00.065 \longrightarrow 00:15:02.896$ P16 is they are really HPV positive

NOTE Confidence: 0.911397074545454

 $00:15:02.896 \longrightarrow 00:15:06.137$ irrespective of what this result is showing.

NOTE Confidence: 0.911397074545454

 $00:15:06.140 \longrightarrow 00:15:08.863$ For those that have the reverse that

NOTE Confidence: 0.911397074545454

00:15:08.863 --> 00:15:11.618 have P16 negative and HPV DNA positive,

NOTE Confidence: 0.911397074545454

 $00{:}15{:}11.620 \dashrightarrow 00{:}15{:}13.420$ it has to be more heterogeneous,

NOTE Confidence: 0.911397074545454

 $00:15:13.420 \longrightarrow 00:15:16.006$ but most of them actually look

NOTE Confidence: 0.911397074545454

 $00:15:16.006 \longrightarrow 00:15:17.299$ like P16 negative,

 $00:15:17.300 \longrightarrow 00:15:20.180 \text{ HPV DNA negative as well.}$

NOTE Confidence: 0.911397074545454

 $00:15:20.180 \longrightarrow 00:15:23.052$ So P 16 overall is an excellent or

NOTE Confidence: 0.911397074545454

 $00:15:23.052 \longrightarrow 00:15:25.379$ do imperfect surrogate indicator,

NOTE Confidence: 0.911397074545454

 $00:15:25.380 \longrightarrow 00:15:29.220$ the discrepant rates between P16 IHC

NOTE Confidence: 0.911397074545454

 $00:15:29.220 \longrightarrow 00:15:33.618$ and things like RNA sexual aboritization.

NOTE Confidence: 0.911397074545454 $00:15:33.620 \longrightarrow 00:15:34.556$ Are is less, NOTE Confidence: 0.911397074545454

 $00{:}15{:}34.556 \dashrightarrow 00{:}15{:}37.160$ it's tend to be less than 5% but

NOTE Confidence: 0.911397074545454

 $00:15:37.160 \longrightarrow 00:15:39.680$ there's not enough data in the

NOTE Confidence: 0.911397074545454

 $00:15:39.680 \longrightarrow 00:15:43.060 *****$ in those particular cases.

NOTE Confidence: 0.911397074545454

 $00:15:43.060 \longrightarrow 00:15:45.565$ There's been some recent emphasis

NOTE Confidence: 0.911397074545454

 $00{:}15{:}45.565 \dashrightarrow 00{:}15{:}48.070$ on these so-called double positives

NOTE Confidence: 0.911397074545454

 $00:15:48.151 \longrightarrow 00:15:50.489$ cases that okay if P6 N is

NOTE Confidence: 0.911397074545454

00:15:50.489 --> 00:15:52.659 significant and P53 is significant,

NOTE Confidence: 0.911397074545454

 $00:15:52.660 \longrightarrow 00:15:54.604$ well a subset of cases will

NOTE Confidence: 0.911397074545454

 $00:15:54.604 \longrightarrow 00:15:55.900$ be positive for both.

NOTE Confidence: 0.911397074545454

 $00:15:55.900 \longrightarrow 00:15:57.682$ These are peer studies that were

 $00:15:57.682 \longrightarrow 00:15:59.698$ published just within the last two months

NOTE Confidence: 0.911397074545454

 $00{:}15{:}59.700 \dashrightarrow 00{:}16{:}02.967$ and you can see the Raka Snova found that.

NOTE Confidence: 0.911397074545454

 $00{:}16{:}02.970 \longrightarrow 00{:}16{:}05.490$ Two out of seven to six cases were positive

NOTE Confidence: 0.911397074545454

 $00:16:05.490 \longrightarrow 00:16:07.686$ and both of them were HPV positive.

NOTE Confidence: 0.911397074545454

 $00:16:07.690 \longrightarrow 00:16:09.655$ But Young and colleagues found

NOTE Confidence: 0.911397074545454

 $00:16:09.655 \longrightarrow 00:16:11.634$ that four out of 225 were positive

NOTE Confidence: 0.911397074545454

 $00:16:11.634 \longrightarrow 00:16:13.809$ and all of them were HPV negative.

NOTE Confidence: 0.911397074545454

 $00:16:13.810 \longrightarrow 00:16:15.847$ They made a big point about saying

NOTE Confidence: 0.911397074545454

 $00:16:15.850 \longrightarrow 00:16:18.302$ all of the cases that are double

NOTE Confidence: 0.911397074545454

 $00:16:18.302 \longrightarrow 00:16:20.294$ positive should be classified as HPV

NOTE Confidence: 0.911397074545454

 $00{:}16{:}20.294 \dashrightarrow 00{:}16{:}22.370$ negative and their data supports that.

NOTE Confidence: 0.911397074545454

 $00{:}16{:}22.370 \dashrightarrow 00{:}16{:}24.946$ But I'm not sure I quite agree

NOTE Confidence: 0.911397074545454

 $00{:}16{:}24.946 \dashrightarrow 00{:}16{:}28.294$ with that in echo or you can see

NOTE Confidence: 0.911397074545454

 $00:16:28.294 \longrightarrow 00:16:31.620$ that 7% of patients that are.

NOTE Confidence: 0.911397074545454

 $00:16:31.620 \longrightarrow 00:16:34.362$ That have HPV positive tumors also

00:16:34.362 --> 00:16:36.636 have ATV53 mutation and another

NOTE Confidence: 0.911397074545454

00:16:36.636 --> 00:16:38.906 study from Memorial Stone Catering

NOTE Confidence: 0.911397074545454

 $00:16:38.906 \longrightarrow 00:16:42.874$ found that 27% of cases that are HPV

NOTE Confidence: 0.911397074545454

 $00:16:42.874 \longrightarrow 00:16:46.090$ positive were also at a P53 mutation.

NOTE Confidence: 0.911397074545454

 $00{:}16{:}46.090 --> 00{:}16{:}46.525 \text{ Again},$

NOTE Confidence: 0.911397074545454

 $00:16:46.525 \longrightarrow 00:16:48.700$ these are relatively small cores,

NOTE Confidence: 0.911397074545454

00:16:48.700 --> 00:16:49.676 but but you know,

NOTE Confidence: 0.911397074545454

 $00:16:49.676 \longrightarrow 00:16:50.896$ it's not surprising that there'll

NOTE Confidence: 0.911397074545454

 $00:16:50.896 \longrightarrow 00:16:52.535$ be a little bit of overlap there.

NOTE Confidence: 0.949059005

 $00:16:54.660 \longrightarrow 00:16:58.400$ The third item is related

NOTE Confidence: 0.949059005

 $00:16:58.400 \longrightarrow 00:17:00.644$ to histologic grading.

NOTE Confidence: 0.949059005

 $00:17:00.650 \longrightarrow 00:17:02.760$ Most gradient of squamous cell

NOTE Confidence: 0.949059005

 $00:17:02.760 \longrightarrow 00:17:04.723$ carcinoma are based on the

NOTE Confidence: 0.949059005

00:17:04.723 --> 00:17:06.578 border system which was developed

NOTE Confidence: 0.949059005

 $00:17:06.578 \longrightarrow 00:17:08.930$ in the 1920s for oral cancer,

NOTE Confidence: 0.949059005

00:17:08.930 --> 00:17:11.390 and it talks about count determining

 $00:17:11.390 \longrightarrow 00:17:13.882$ the percentage of the tumor that

NOTE Confidence: 0.949059005

 $00:17:13.882 \longrightarrow 00:17:15.438$ have this undifferentiated cells

NOTE Confidence: 0.949059005

 $00:17:15.438 \longrightarrow 00:17:18.410$ as a way of stratifying tumors.

NOTE Confidence: 0.949059005

 $00:17:18.410 \longrightarrow 00:17:20.150$ But the contemporary application

NOTE Confidence: 0.949059005

 $00:17:20.150 \longrightarrow 00:17:22.325$ of that system is problematic

NOTE Confidence: 0.949059005

 $00:17:22.325 \longrightarrow 00:17:24.595$ because there are too many variables

NOTE Confidence: 0.949059005

 $00:17:24.595 \longrightarrow 00:17:26.365$ and everyone is applying it.

NOTE Confidence: 0.949059005

 $00:17:26.370 \longrightarrow 00:17:27.414$ In different ways.

NOTE Confidence: 0.949059005

 $00:17:27.414 \longrightarrow 00:17:31.047$ So there tends to be a lot of inter

NOTE Confidence: 0.949059005

 $00{:}17{:}31.047 \dashrightarrow 00{:}17{:}32.950$ observer variability for the mountain

NOTE Confidence: 0.949059005

 $00:17:32.950 \longrightarrow 00:17:35.319$ of tumors that are in the mid of the

NOTE Confidence: 0.949059005

 $00:17:35.319 \longrightarrow 00:17:37.020$ bell curve that that is that are

NOTE Confidence: 0.949059005

 $00{:}17{:}37.020 \dashrightarrow 00{:}17{:}38.905$ not extremely well differentiated

NOTE Confidence: 0.949059005

 $00:17:38.905 \longrightarrow 00:17:41.009$ or extremely poorly differentiated.

NOTE Confidence: 0.949059005

 $00:17:41.010 \longrightarrow 00:17:42.850$ And to make matters worse

00:17:42.850 --> 00:17:44.322 grading is not significant.

NOTE Confidence: 0.949059005

00:17:44.330 --> 00:17:47.322 So you know here's studies

NOTE Confidence: 0.949059005

 $00:17:47.322 \longrightarrow 00:17:49.050$ published in the last 10 years,

NOTE Confidence: 0.949059005

 $00:17:49.050 \longrightarrow 00:17:52.930$ you got 42 studies and none of those

NOTE Confidence: 0.949059005

 $00:17:52.930 \longrightarrow 00:17:56.225$ studies and when do we ever say 0.

NOTE Confidence: 0.949059005

 $00:17:56.230 \longrightarrow 00:17:59.212$ But none of those studies have

NOTE Confidence: 0.949059005

 $00:17:59.212 \longrightarrow 00:18:02.035$ found grading to be associated with

NOTE Confidence: 0.949059005

 $00{:}18{:}02.035 \dashrightarrow 00{:}18{:}04.420$ overall survival and 83% of them

NOTE Confidence: 0.949059005

 $00:18:04.420 \longrightarrow 00:18:06.730$ have not found it to be associated

NOTE Confidence: 0.949059005

 $00:18:06.804 \longrightarrow 00:18:09.028$ with progression free survival.

NOTE Confidence: 0.949059005

00:18:09.030 --> 00:18:10.582 But still, you know,

NOTE Confidence: 0.949059005

 $00:18:10.582 \longrightarrow 00:18:12.522$ there are alternative forms of

NOTE Confidence: 0.949059005

 $00:18:12.522 \longrightarrow 00:18:14.627$ grading that have been attempted.

NOTE Confidence: 0.949059005

00:18:14.630 --> 00:18:15.232 You know,

NOTE Confidence: 0.949059005

00:18:15.232 --> 00:18:17.038 GOG had a very influential study

NOTE Confidence: 0.949059005

 $00:18:17.038 \longrightarrow 00:18:19.376$ from the early 1990s where they had

 $00:18:19.376 \longrightarrow 00:18:21.428$ over 600 cases and they modified

NOTE Confidence: 0.949059005

 $00{:}18{:}21.428 \dashrightarrow 00{:}18{:}23.415$ broader system to basically change

NOTE Confidence: 0.949059005

 $00{:}18{:}23.415 \dashrightarrow 00{:}18{:}25.385$ the percentages of the grades.

NOTE Confidence: 0.949059005

 $00:18:25.390 \longrightarrow 00:18:27.380$ And they thought that correlated

NOTE Confidence: 0.949059005

 $00:18:27.380 \longrightarrow 00:18:29.370$ better with lymph node metastasis

NOTE Confidence: 0.949059005

 $00{:}18{:}29.433 \dashrightarrow 00{:}18{:}31.628$ as compared with the standardized

NOTE Confidence: 0.949059005

 $00:18:31.628 \longrightarrow 00:18:32.506$ brother criteria.

NOTE Confidence: 0.949059005

00:18:32.510 --> 00:18:36.626 But this never achieved widespread usage,

NOTE Confidence: 0.949059005

00:18:36.630 --> 00:18:38.382 mostly because I think they never

NOTE Confidence: 0.949059005

 $00:18:38.382 \longrightarrow 00:18:40.549$ published what is this specific criteria,

NOTE Confidence: 0.949059005

 $00{:}18{:}40.550 \dashrightarrow 00{:}18{:}44.228$ What do you consider undifferentiated cells

NOTE Confidence: 0.949059005

00:18:44.230 --> 00:18:47.344 kind of. And so it just never took off.

NOTE Confidence: 0.949059005

 $00{:}18{:}47.350 \dashrightarrow 00{:}18{:}50.878$ Then there's the so-called spray like

NOTE Confidence: 0.949059005

 $00:18:50.878 \longrightarrow 00:18:52.894$ pattern or the infiltrative pattern.

NOTE Confidence: 0.949059005

 $00:18:52.894 \longrightarrow 00:18:55.030$ And two studies found it's not

 $00:18:55.098 \longrightarrow 00:18:56.730$ associated with recurrence.

NOTE Confidence: 0.949059005

00:18:56.730 --> 00:18:59.621 But Suzanne Jeffers had a nice study

NOTE Confidence: 0.949059005

00:18:59.621 --> 00:19:02.322 from 2015 from the University of

NOTE Confidence: 0.949059005

 $00:19:02.322 \longrightarrow 00:19:04.662$ Arkansas showing that it's associated

NOTE Confidence: 0.949059005

00:19:04.662 --> 00:19:07.270 with recurrence 2 times more likely

NOTE Confidence: 0.949059005

 $00:19:07.270 \longrightarrow 00:19:09.410$ to be associated with recurrence.

NOTE Confidence: 0.949059005

 $00:19:09.410 \longrightarrow 00:19:11.465$ Then there's the Fibro mixoid

NOTE Confidence: 0.949059005

00:19:11.465 --> 00:19:12.287 stromal response,

NOTE Confidence: 0.949059005

 $00:19:12.290 \longrightarrow 00:19:14.663$ which has been shown since the early

NOTE Confidence: 0.949059005

00:19:14.663 --> 00:19:16.461 1990s and subsequently confirmed by

NOTE Confidence: 0.949059005

 $00{:}19{:}16.461 \dashrightarrow 00{:}19{:}18.615$ at least two different other studies.

NOTE Confidence: 0.949059005

 $00:19:18.620 \longrightarrow 00:19:22.376$ That it's associated with poor survival

NOTE Confidence: 0.949059005

 $00:19:22.380 \longrightarrow 00:19:24.424$ and more extensively metastasis

NOTE Confidence: 0.949059005

00:19:24.424 --> 00:19:27.904 and all the patient group And then

NOTE Confidence: 0.949059005

00:19:27.904 --> 00:19:30.676 finally our group reported a tumor

NOTE Confidence: 0.949059005

 $00:19:30.676 \longrightarrow 00:19:32.532$ budding that basically said Okay

 $00:19:32.532 \longrightarrow 00:19:35.113$ if you classify the level of tumor

NOTE Confidence: 0.949059005

 $00{:}19{:}35.113 \dashrightarrow 00{:}19{:}36.996$ budding into three groups which

NOTE Confidence: 0.949059005

 $00:19:36.996 \longrightarrow 00:19:39.642$ has been the same system used at

NOTE Confidence: 0.949059005

 $00:19:39.642 \longrightarrow 00:19:41.988$ other other organ sites that you

NOTE Confidence: 0.949059005

 $00{:}19{:}41.988 \dashrightarrow 00{:}19{:}44.009$ have clear separation between in

NOTE Confidence: 0.949059005

00:19:44.009 --> 00:19:46.325 terms of overall survival and DFS.

NOTE Confidence: 0.949059005

 $00:19:46.330 \longrightarrow 00:19:49.040$ Between the the groups independent

NOTE Confidence: 0.949059005

 $00:19:49.040 \longrightarrow 00:19:52.570$ of the factors including P53 status

NOTE Confidence: 0.949059005

 $00:19:52.570 \longrightarrow 00:19:54.610$ and HPV status.

NOTE Confidence: 0.949059005

00:19:54.610 --> 00:19:55.124 However,

NOTE Confidence: 0.949059005

 $00{:}19{:}55.124 \dashrightarrow 00{:}19{:}59.236$ I think you know and this is mostly

NOTE Confidence: 0.949059005

 $00:19:59.236 \longrightarrow 00:20:02.463$ hypothesis that all of this are

NOTE Confidence: 0.949059005

 $00{:}20{:}02.463 \dashrightarrow 00{:}20{:}05.078$ defining a single aggressive subset

NOTE Confidence: 0.949059005

 $00{:}20{:}05.179 \dashrightarrow 00{:}20{:}08.023$ probably 1 where EMT is operational

NOTE Confidence: 0.949059005

 $00:20:08.023 \longrightarrow 00:20:11.488$ or activated or most significant.

 $00:20:11.490 \longrightarrow 00:20:13.800$ I think that's what this is.

NOTE Confidence: 0.949059005

00:20:13.800 --> 00:20:16.608 We were trying to or we tried to sort

NOTE Confidence: 0.949059005

 $00:20:16.608 \longrightarrow 00:20:19.688$ of prove that there was a too much

NOTE Confidence: 0.949059005

 $00:20:19.688 \longrightarrow 00:20:22.639$ overlap to really tell a coherent story.

NOTE Confidence: 0.949059005

 $00:20:22.640 \longrightarrow 00:20:25.096$ It's the same cases that tended to show

NOTE Confidence: 0.949059005

00:20:25.096 --> 00:20:27.080 the infiltrative pattern and fiber mixer,

NOTE Confidence: 0.949059005

 $00:20:27.080 \longrightarrow 00:20:28.870$ stroma or tumor body and

NOTE Confidence: 0.949059005

 $00:20:28.870 \longrightarrow 00:20:30.660$ infiltrative pattern or so on

NOTE Confidence: 0.880026373076923

 $00:20:30.736 \longrightarrow 00:20:31.600$ and so forth.

NOTE Confidence: 0.880026373076923

 $00:20:31.600 \longrightarrow 00:20:32.596$ There was a lot of overlap.

NOTE Confidence: 0.880026373076923

 $00{:}20{:}32.600 \dashrightarrow 00{:}20{:}34.287$ We were able to show that each

NOTE Confidence: 0.880026373076923

 $00:20:34.287 \longrightarrow 00:20:35.400$ one was significant though,

NOTE Confidence: 0.880026373076923

 $00:20:35.400 \longrightarrow 00:20:38.400$ but there was such significant overlap.

NOTE Confidence: 0.880026373076923

 $00:20:38.400 \longrightarrow 00:20:40.520$ So where do we stand at present time?

NOTE Confidence: 0.880026373076923

 $00:20:40.520 \longrightarrow 00:20:44.224$ Well, gradient is listed as a data element.

NOTE Confidence: 0.880026373076923

 $00{:}20{:}44.230 \dashrightarrow 00{:}20{:}46.148$ And as a result, there's a required

00:20:46.148 --> 00:20:47.910 element in the caps and optics,

NOTE Confidence: 0.880026373076923

 $00{:}20{:}47.910 \dashrightarrow 00{:}20{:}50.750$ but I CCR are in the most recent data sets.

NOTE Confidence: 0.880026373076923

 $00:20:50.750 \longrightarrow 00:20:52.496$ That greeting is not a Co

NOTE Confidence: 0.880026373076923

 $00:20:52.496 \longrightarrow 00:20:54.550$ item and it's not recommended,

NOTE Confidence: 0.880026373076923

00:20:54.550 --> 00:20:57.898 whereas you know it's still not a

NOTE Confidence: 0.880026373076923

 $00:20:57.898 \longrightarrow 00:21:00.706$ clinical decision point at present time.

NOTE Confidence: 0.906708138125

 $00:21:03.910 \longrightarrow 00:21:06.353$ The 4th and the biggest section of

NOTE Confidence: 0.906708138125

 $00:21:06.353 \longrightarrow 00:21:08.411$ this presentation leads to precursor

NOTE Confidence: 0.906708138125

 $00:21:08.411 \longrightarrow 00:21:10.299$ lesions and background dermatosis.

NOTE Confidence: 0.906708138125

 $00:21:10.300 \longrightarrow 00:21:13.180$ Which is really a

NOTE Confidence: 0.906708138125

 $00:21:13.180 \longrightarrow 00:21:15.464$ controversial area by itself.

NOTE Confidence: 0.906708138125

 $00:21:15.464 \longrightarrow 00:21:18.418$ We'll start out with the more conventional.

NOTE Confidence: 0.906708138125

 $00{:}21{:}18.420 \dashrightarrow 00{:}21{:}23.802$ So the original carcinoma insight of skin

NOTE Confidence: 0.906708138125

00:21:23.802 --> 00:21:27.978 was described by Doctor John Bowen in 1912.

NOTE Confidence: 0.906708138125

 $00:21:27.980 \longrightarrow 00:21:31.900$ It took maybe 10 years for somebody

00:21:31.900 --> 00:21:34.180 to find to describe something similar

NOTE Confidence: 0.906708138125

 $00:21:34.180 \longrightarrow 00:21:37.336$ in the **** took another 20 years

NOTE Confidence: 0.906708138125

 $00:21:37.336 \longrightarrow 00:21:40.330$ for somebody to describe the series.

NOTE Confidence: 0.906708138125

00:21:40.330 --> 00:21:42.970 Of lesions and then ten years after that,

NOTE Confidence: 0.906708138125

 $00:21:42.970 \longrightarrow 00:21:45.210$ 15 years after that for the term

NOTE Confidence: 0.906708138125

00:21:45.210 --> 00:21:47.466 custom inside you to be proposed.

NOTE Confidence: 0.906708138125

 $00:21:47.466 \longrightarrow 00:21:50.490$ And it's kind of highlighted the glacial

NOTE Confidence: 0.906708138125

 $00:21:50.574 \longrightarrow 00:21:53.682$ pace of progress in the ***** diseases

NOTE Confidence: 0.906708138125

00:21:53.682 --> 00:21:57.809 during the early part of the last century.

NOTE Confidence: 0.906708138125

00:21:57.810 --> 00:21:59.042 But the nomenclature disorder,

NOTE Confidence: 0.906708138125

 $00:21:59.042 \longrightarrow 00:22:01.406$ as I like to call it, persistent.

NOTE Confidence: 0.906708138125

 $00:22:01.406 \longrightarrow 00:22:03.986$ With different terms being used.

NOTE Confidence: 0.906708138125

 $00:22:03.990 \longrightarrow 00:22:06.120$ Remember at that point it had

NOTE Confidence: 0.906708138125

 $00{:}22{:}06.120 \dashrightarrow 00{:}22{:}07.870$ not been associated with HPV.

NOTE Confidence: 0.906708138125

 $00:22:07.870 \longrightarrow 00:22:11.576$ In the 60s and 50s it hadn't

NOTE Confidence: 0.906708138125

 $00:22:11.576 \longrightarrow 00:22:12.828$ been associated with HPV.

 $00:22:12.830 \longrightarrow 00:22:15.590$ So the lesions with different clinical

NOTE Confidence: 0.906708138125

 $00:22:15.590 \longrightarrow 00:22:17.883$ pathologic basis were getting called

NOTE Confidence: 0.906708138125

 $00:22:17.883 \longrightarrow 00:22:20.543$ precursor lesions if they had a typia.

NOTE Confidence: 0.906708138125

00:22:20.550 --> 00:22:23.040 So ultimately ISSVD International Society

NOTE Confidence: 0.906708138125

 $00{:}22{:}23.040 \dashrightarrow 00{:}22{:}26.564$ for the Study of Over Vaginal Diseases

NOTE Confidence: 0.906708138125

 $00{:}22{:}26.564 \dashrightarrow 00{:}22{:}29.925$ stepped in in 1976 and proposed the term

NOTE Confidence: 0.906708138125

00:22:29.925 --> 00:22:32.110 squamous cell carcinoma inside 2:00 to.

NOTE Confidence: 0.906708138125

 $00:22:32.110 \longrightarrow 00:22:34.366$ Bring everything in line with similar

NOTE Confidence: 0.906708138125

 $00{:}22{:}34.366 \dashrightarrow 00{:}22{:}36.629$ terminology in the skin and if you

NOTE Confidence: 0.906708138125

 $00{:}22{:}36.629 \longrightarrow 00{:}22{:}38.735$ look at the various the top part of

NOTE Confidence: 0.906708138125

 $00{:}22{:}38.735 \dashrightarrow 00{:}22{:}40.667$ this table you can see the evolution

NOTE Confidence: 0.906708138125

00:22:40.667 --> 00:22:42.483 and the terminology all the way

NOTE Confidence: 0.906708138125

 $00:22:42.483 \longrightarrow 00:22:43.983$ to where we are today,

NOTE Confidence: 0.906708138125

 $00:22:43.990 \longrightarrow 00:22:46.734$ which is based on last guidelines.

NOTE Confidence: 0.906708138125 00:22:46.734 --> 00:22:47.982 L cell, NOTE Confidence: 0.906708138125 $00:22:47.982 \longrightarrow 00:22:50.562$ H cell as shown here.

NOTE Confidence: 0.906708138125

 $00{:}22{:}50.562 \dashrightarrow 00{:}22{:}53.670$ Now of course nothing has changed about

NOTE Confidence: 0.906708138125

 $00:22:53.759 \longrightarrow 00:22:57.590$ the pathology of Costnoma inside two or

NOTE Confidence: 0.906708138125

 $00:22:57.590 \longrightarrow 00:22:59.885$ VIN 3 or however you want to call it.

NOTE Confidence: 0.906708138125

 $00:22:59.890 \longrightarrow 00:23:01.490$ Except the morphologic spectrum

NOTE Confidence: 0.906708138125

 $00:23:01.490 \longrightarrow 00:23:02.690$ has gotten expanded,

NOTE Confidence: 0.906708138125

 $00:23:02.690 \longrightarrow 00:23:05.660$ so basiloid variations and are more

NOTE Confidence: 0.906708138125

 $00:23:05.660 \longrightarrow 00:23:08.570$ railway recognized or worthy variations.

NOTE Confidence: 0.906708138125

 $00{:}23{:}08.570 \dashrightarrow 00{:}23{:}10.814$ There's a so-called Divin like pattern

NOTE Confidence: 0.906708138125

 $00:23:10.814 \longrightarrow 00:23:13.905$ of H cell where in the atypia is

NOTE Confidence: 0.906708138125

 $00{:}23{:}13.905 \dashrightarrow 00{:}23{:}16.191$ restricted mostly to the basal regions

NOTE Confidence: 0.906708138125

 $00:23:16.261 \longrightarrow 00:23:18.222$ of the epidermis until one goes down

NOTE Confidence: 0.906708138125

 $00:23:18.222 \longrightarrow 00:23:20.009$ to look at it and high power it.

NOTE Confidence: 0.906708138125

00:23:20.010 --> 00:23:21.990 And you'd appreciate a lot of

NOTE Confidence: 0.906708138125

00:23:21.990 --> 00:23:24.024 mitotic figures in upper layers of

NOTE Confidence: 0.906708138125

 $00:23:24.024 \longrightarrow 00:23:25.644$ the epidermis where this doesn't

 $00:23:25.644 \longrightarrow 00:23:27.659$ seem to be basiloid change.

NOTE Confidence: 0.906708138125

 $00:23:27.660 \longrightarrow 00:23:30.156$ And that hot that is a clue

NOTE Confidence: 0.906708138125

 $00:23:30.156 \longrightarrow 00:23:32.720$ that this could be even like H sill.

NOTE Confidence: 0.906708138125

00:23:32.720 --> 00:23:35.669 When you do P6 stain it lights up and

NOTE Confidence: 0.906708138125

 $00:23:35.669 \longrightarrow 00:23:38.288$ P53 shows that this is a wild type

NOTE Confidence: 0.906708138125

 $00:23:38.288 \longrightarrow 00:23:39.958$ staining pattern because there's no

NOTE Confidence: 0.906708138125

00:23:39.958 --> 00:23:42.752 staining of the base and this is basal

NOTE Confidence: 0.906708138125

 $00{:}23{:}42.752 \longrightarrow 00{:}23{:}44.140$ sparing media epithelial staining.

NOTE Confidence: 0.906708138125

 $00:23:44.140 \longrightarrow 00:23:49.340$ This is a wild type staining pattern when

NOTE Confidence: 0.906708138125

 $00{:}23{:}49.340 \dashrightarrow 00{:}23{:}53.155$ H sill is comorbid with lichens sclerosus.

NOTE Confidence: 0.906708138125

00:23:53.160 --> 00:23:55.435 If it can take on this appearance,

NOTE Confidence: 0.906708138125

 $00{:}23{:}55.440 \dashrightarrow 00{:}23{:}57.720$ this deviant like HCL like appearance.

NOTE Confidence: 0.906708138125

 $00{:}23{:}57.720 \dashrightarrow 00{:}23{:}59.344$ Here for example at the lower left

NOTE Confidence: 0.906708138125

 $00{:}23{:}59.344 \dashrightarrow 00{:}24{:}00.955$ you can see the conventional HCL

NOTE Confidence: 0.906708138125

 $00:24:00.955 \longrightarrow 00:24:02.964$ and then the portions that are above

00:24:03.023 --> 00:24:04.685 the like in sclerosis looks almost

NOTE Confidence: 0.906708138125

 $00{:}24{:}04.685 \dashrightarrow 00{:}24{:}06.877$ normal and low power until you go

NOTE Confidence: 0.906708138125

 $00:24:06.877 \longrightarrow 00:24:08.672$ in high magnification and appreciate

NOTE Confidence: 0.906708138125

00:24:08.672 --> 00:24:10.280 some of the Ethiopia.

NOTE Confidence: 0.906708138125

 $00:24:10.280 \longrightarrow 00:24:12.790$ Also more recognized over the

NOTE Confidence: 0.906708138125

 $00{:}24{:}12.790 \dashrightarrow 00{:}24{:}15.300$ last several decades is palliatory

NOTE Confidence: 0.906708138125

00:24:15.380 --> 00:24:18.096 scatter of of HCL which can result

NOTE Confidence: 0.906708138125

 $00:24:18.096 \longrightarrow 00:24:20.216$ in P16 sparing the base.

NOTE Confidence: 0.906708138125

 $00:24:20.220 \longrightarrow 00:24:21.978$ And this you can see here,

NOTE Confidence: 0.906708138125

 $00:24:21.980 \longrightarrow 00:24:23.636$ probably better shown here.

NOTE Confidence: 0.906708138125

 $00{:}24{:}23.636 \dashrightarrow 00{:}24{:}26.120$ One can also see this pattern

NOTE Confidence: 0.9459142625

00:24:26.196 --> 00:24:28.316 that the peripheries of regular

NOTE Confidence: 0.9459142625

 $00{:}24{:}28.316 \dashrightarrow 00{:}24{:}30.590$ HCL where you know this just

NOTE Confidence: 0.9459142625

 $00:24:30.590 \longrightarrow 00:24:33.060$ scattered and that is a result.

NOTE Confidence: 0.9459142625

 $00:24:33.060 \longrightarrow 00:24:35.940$ P16 does a single base.

NOTE Confidence: 0.9459142625

 $00:24:35.940 \longrightarrow 00:24:38.596$ And then finally we reported on a series

 $00:24:38.596 \longrightarrow 00:24:41.135$ of cases that can have such fluorid

NOTE Confidence: 0.9459142625

 $00{:}24{:}41.135 \dashrightarrow 00{:}24{:}44.320$ edema and inflammation in the dermis.

NOTE Confidence: 0.9459142625

00:24:44.320 --> 00:24:47.280 That it looks like you know it could

NOTE Confidence: 0.9459142625

00:24:47.280 --> 00:24:49.380 be mistaken until one goes on high

NOTE Confidence: 0.9459142625

 $00:24:49.380 \longrightarrow 00:24:50.857$ magnification to appreciate all the

NOTE Confidence: 0.9459142625

00:24:50.857 --> 00:24:52.960 atypia that's present in in the lesion.

NOTE Confidence: 0.928712271764706

 $00:24:55.280 \longrightarrow 00:24:58.311$ Now the incidence of HCL has increased

NOTE Confidence: 0.928712271764706

00:24:58.311 --> 00:25:00.131 by several thousand percentage

NOTE Confidence: 0.928712271764706

 $00:25:00.131 \longrightarrow 00:25:02.759$ points over the last 50 years,

NOTE Confidence: 0.928712271764706

 $00:25:02.760 \longrightarrow 00:25:04.890$ but the progression rate has

NOTE Confidence: 0.928712271764706

 $00:25:04.890 \longrightarrow 00:25:06.594$ remained relatively stable with

NOTE Confidence: 0.928712271764706

 $00{:}25{:}06.600 \dashrightarrow 00{:}25{:}10.482$ about 9% progressing if untreated

NOTE Confidence: 0.928712271764706

 $00{:}25{:}10.482 \dashrightarrow 00{:}25{:}13.968$ and low percentage less than 5%.

NOTE Confidence: 0.928712271764706

 $00:25:13.970 \longrightarrow 00:25:16.682$ Of cases we identified are called

NOTE Confidence: 0.928712271764706

00:25:16.682 --> 00:25:19.290 cancer in the resection specimen.

00:25:19.290 --> 00:25:21.174 That said though,

NOTE Confidence: 0.928712271764706

 $00{:}25{:}21.174 \dashrightarrow 00{:}25{:}24.314$ there still remains this big

NOTE Confidence: 0.928712271764706

00:25:24.314 --> 00:25:26.845 disconnect wherein in most insight

NOTE Confidence: 0.928712271764706

 $00:25:26.845 \longrightarrow 00:25:28.970$ to lesions are HPV associated,

NOTE Confidence: 0.928712271764706

 $00:25:28.970 \longrightarrow 00:25:31.595$ but most invasive lesions are

NOTE Confidence: 0.928712271764706

 $00:25:31.595 \longrightarrow 00:25:33.822$ HPV independent and in the 70s.

NOTE Confidence: 0.928712271764706

 $00:25:33.822 \longrightarrow 00:25:36.453$ That caused a look back to a study

NOTE Confidence: 0.928712271764706

 $00:25:36.453 \longrightarrow 00:25:38.049$ that was originally published

NOTE Confidence: 0.928712271764706

 $00:25:38.049 \longrightarrow 00:25:41.198$ in 1961 by It Built and Goslin.

NOTE Confidence: 0.928712271764706

 $00:25:41.200 \longrightarrow 00:25:42.640$ And they talked about three

NOTE Confidence: 0.928712271764706

 $00{:}25{:}42.640 \dashrightarrow 00{:}25{:}43.792$ types of intrepidated costs,

NOTE Confidence: 0.928712271764706

 $00:25:43.800 \longrightarrow 00:25:45.528$ new line including of the simplex

NOTE Confidence: 0.928712271764706

00:25:45.528 --> 00:25:47.441 type of course of the bonus type

NOTE Confidence: 0.928712271764706

 $00:25:47.441 \longrightarrow 00:25:49.367$ is what we now refer to as HCL

NOTE Confidence: 0.928712271764706

00:25:49.367 --> 00:25:51.068 and the pygas type we refer to

NOTE Confidence: 0.928712271764706

 $00{:}25{:}51.068 \dashrightarrow 00{:}25{:}53.342$ as extra mammary pygas disease.

 $00:25:53.342 \longrightarrow 00:25:57.080$ But the simplex type is what they really,

NOTE Confidence: 0.928712271764706 00:25:57.080 --> 00:25:57.760 you know, NOTE Confidence: 0.928712271764706

 $00:25:57.760 \longrightarrow 00:25:59.158$ were initially introducing

NOTE Confidence: 0.928712271764706

00:25:59.158 --> 00:26:01.304 at that point And it was,

NOTE Confidence: 0.928712271764706

 $00:26:01.304 \longrightarrow 00:26:03.459$ it was I like to highlight this study

NOTE Confidence: 0.928712271764706

 $00:26:03.459 \longrightarrow 00:26:05.224$ because especially for the trainees

NOTE Confidence: 0.928712271764706

 $00:26:05.224 \longrightarrow 00:26:07.118$ and the audience it highlights

NOTE Confidence: 0.928712271764706

 $00:26:07.118 \longrightarrow 00:26:09.238$ the significance of making basic.

NOTE Confidence: 0.928712271764706

00:26:09.240 --> 00:26:10.665 Clinical pathologic observations,

NOTE Confidence: 0.928712271764706

00:26:10.665 --> 00:26:12.090 because everything they've

NOTE Confidence: 0.928712271764706

 $00:26:12.090 \longrightarrow 00:26:14.108$ ever said really held's true.

NOTE Confidence: 0.928712271764706

 $00:26:14.108 \longrightarrow 00:26:16.600$ If you look and read that paper,

NOTE Confidence: 0.928712271764706

 $00{:}26{:}16.600 \dashrightarrow 00{:}26{:}18.950$ they talked about its association

NOTE Confidence: 0.928712271764706

 $00:26:18.950 \longrightarrow 00:26:20.360$ with leukoplicy vilitis,

NOTE Confidence: 0.928712271764706

 $00:26:20.360 \longrightarrow 00:26:21.960$ which is like in sclerosis.

 $00:26:21.960 \longrightarrow 00:26:23.508$ They talked about how it has

NOTE Confidence: 0.928712271764706

00:26:23.508 --> 00:26:24.880 a short insight to face.

NOTE Confidence: 0.928712271764706

 $00:26:24.880 \longrightarrow 00:26:26.980$ They talked about how it's

NOTE Confidence: 0.928712271764706

 $00:26:26.980 \longrightarrow 00:26:29.080$ frequently present on the margins.

NOTE Confidence: 0.928712271764706

 $00:26:29.080 \longrightarrow 00:26:31.876$ All of those have remained true.

NOTE Confidence: 0.928712271764706

 $00:26:31.880 \longrightarrow 00:26:33.488$ And when you focus on the

NOTE Confidence: 0.928712271764706

 $00:26:33.488 \longrightarrow 00:26:34.960$ lower portion of this table,

NOTE Confidence: 0.928712271764706

 $00:26:34.960 \longrightarrow 00:26:37.408$ you can see the evolution in the terminology.

NOTE Confidence: 0.928712271764706

00:26:37.410 --> 00:26:39.684 We started with ISSV D's hypertrophic

NOTE Confidence: 0.928712271764706

00:26:39.684 --> 00:26:42.355 dystrophy and V IM3 of the differentiated

NOTE Confidence: 0.928712271764706

 $00:26:42.355 \longrightarrow 00:26:44.527$ type to where we are today,

NOTE Confidence: 0.928712271764706

 $00:26:44.530 \longrightarrow 00:26:46.648$ which is differentiated

NOTE Confidence: 0.928712271764706

 $00{:}26{:}46.648 {\:\dashrightarrow\:} 00{:}26{:}48.766$ for ventricular pleasure.

NOTE Confidence: 0.928712271764706

 $00:26:48.770 \longrightarrow 00:26:50.910$ D event is generally seen

NOTE Confidence: 0.928712271764706

 $00:26:50.910 \longrightarrow 00:26:53.050$ in an older age group.

NOTE Confidence: 0.928712271764706

 $00:26:53.050 \longrightarrow 00:26:54.515$ There's a school of thought

00:26:54.515 --> 00:26:56.293 that's emerging that D event can

NOTE Confidence: 0.928712271764706

 $00:26:56.293 \longrightarrow 00:26:58.085$ be seen in the younger and it's

NOTE Confidence: 0.928712271764706

 $00:26:58.085 \longrightarrow 00:26:59.809$ increasing in the younger age group,

NOTE Confidence: 0.928712271764706

 $00:26:59.810 \longrightarrow 00:27:02.096$ which is probably related to that

NOTE Confidence: 0.928712271764706

 $00{:}27{:}02.096 \dashrightarrow 00{:}27{:}04.594$ second peak like in sclerosis which

NOTE Confidence: 0.928712271764706

 $00:27:04.594 \longrightarrow 00:27:07.730$ occurs in teenagers and younger than 10.

NOTE Confidence: 0.928712271764706

00:27:07.730 --> 00:27:10.089 So those patients probably when they're 30th,

NOTE Confidence: 0.928712271764706

 $00:27:10.090 \longrightarrow 00:27:11.610$ so may develop the event.

NOTE Confidence: 0.928712271764706

 $00:27:11.610 \longrightarrow 00:27:13.362$ In any event,

NOTE Confidence: 0.928712271764706

 $00{:}27{:}13.362 --> 00{:}27{:}16.058$ most patients are postmenopausal age group.

NOTE Confidence: 0.928712271764706

 $00:27:16.058 \longrightarrow 00:27:18.350$ The event is generally a centrally

NOTE Confidence: 0.928712271764706

 $00{:}27{:}18.412 \dashrightarrow 00{:}27{:}20.884$ located disease or current inhaler skin

NOTE Confidence: 0.928712271764706

 $00{:}27{:}20.884 \to 00{:}27{:}23.250$ are as without keratinized and epithelium.

NOTE Confidence: 0.928712271764706

 $00{:}27{:}23.250 \dashrightarrow 00{:}27{:}25.546$ But of course it can get big and

NOTE Confidence: 0.928712271764706

 $00:27:25.546 \longrightarrow 00:27:27.130$ extend upward outwards to the

 $00:27:27.130 \longrightarrow 00:27:31.210$ Libya majora and elsewhere as well.

NOTE Confidence: 0.928712271764706

00:27:31.210 --> 00:27:33.490 Most events are diagnosed

NOTE Confidence: 0.928712271764706

 $00:27:33.490 \longrightarrow 00:27:36.340$ concurrent with the invasive cancer.

NOTE Confidence: 0.928712271764706

 $00:27:36.340 \longrightarrow 00:27:38.314$ But cases that are diagnosed in

NOTE Confidence: 0.928712271764706

 $00:27:38.314 \longrightarrow 00:27:40.339$ isolation are often difficult to diagnose.

NOTE Confidence: 0.928712271764706 00:27:40.340 --> 00:27:40.668 Indeed, NOTE Confidence: 0.928712271764706

00:27:40.668 --> 00:27:42.636 when you have patients with cancer

NOTE Confidence: 0.928712271764706

 $00:27:42.636 \longrightarrow 00:27:45.410$ and you go back and look at their

NOTE Confidence: 0.928712271764706

00:27:45.410 --> 00:27:47.300 ostensibly prior lichen sclerosis biopsies,

NOTE Confidence: 0.928712271764706

 $00:27:47.300 \longrightarrow 00:27:49.700$ a lot of those lichen sclerosis

NOTE Confidence: 0.928712271764706

 $00{:}27{:}49.700 \dashrightarrow 00{:}27{:}51.340$ biopsies had different in them.

NOTE Confidence: 0.9402536

 $00{:}27{:}53.750 \longrightarrow 00{:}27{:}56.878$ In terms of the percentage of the events

NOTE Confidence: 0.9402536

00:27:56.878 --> 00:27:59.106 that found to have cancer follow up,

NOTE Confidence: 0.9402536

 $00:27:59.110 \longrightarrow 00:28:02.158$ it ranges from 32.8% to what I consider

NOTE Confidence: 0.9402536

 $00:28:02.158 \longrightarrow 00:28:04.908$ a little bit of an outlier study.

NOTE Confidence: 0.9402536

 $00:28:04.910 \longrightarrow 00:28:07.982$ They found 85.7% at follow up.

 $00:28:07.982 \longrightarrow 00:28:10.310$ This is from the Vancouver group

NOTE Confidence: 0.9402536

 $00{:}28{:}10.310 \to 00{:}28{:}12.053$ and but I think what everyone would

NOTE Confidence: 0.9402536

 $00:28:12.053 \longrightarrow 00:28:13.882$ agree on is the time to progression

NOTE Confidence: 0.9402536

 $00:28:13.882 \longrightarrow 00:28:16.083$ to look at the far right column is

NOTE Confidence: 0.9402536

 $00:28:16.083 \longrightarrow 00:28:17.623$ that everyone agrees that there's

NOTE Confidence: 0.9402536

00:28:17.623 --> 00:28:20.278 a short median time to progression

NOTE Confidence: 0.9402536

 $00:28:20.278 \longrightarrow 00:28:23.734$ between the diagnosis of the Devon.

NOTE Confidence: 0.9402536

 $00:28:23.740 \longrightarrow 00:28:26.784$ By itself, in a biopsy and the subsequent

NOTE Confidence: 0.9402536

00:28:26.784 --> 00:28:29.500 diagnosis of a carcinoma can range widely,

NOTE Confidence: 0.9402536

 $00:28:29.500 \longrightarrow 00:28:33.574$ but the median time is relatively short.

NOTE Confidence: 0.9402536

 $00:28:33.580 \longrightarrow 00:28:36.005$ There's a cumulative risk of

NOTE Confidence: 0.9402536

 $00:28:36.005 \longrightarrow 00:28:37.460$ cancer for defend.

NOTE Confidence: 0.9402536

00:28:37.460 --> 00:28:39.140 If you look at 10 years,

NOTE Confidence: 0.9402536

 $00:28:39.140 \longrightarrow 00:28:40.540$ regular HCL at 10 years,

NOTE Confidence: 0.9402536

 $00:28:40.540 \longrightarrow 00:28:42.220$ like I said before, it's only about

 $00:28:42.220 \longrightarrow 00:28:44.516$ 10% and look at how flat the curve is.

NOTE Confidence: 0.9402536

 $00:28:44.520 \longrightarrow 00:28:45.404$ On the other hand,

NOTE Confidence: 0.9402536

 $00:28:45.404 \longrightarrow 00:28:47.239$ when you look at Devin at 10 years,

NOTE Confidence: 0.9402536

 $00:28:47.240 \longrightarrow 00:28:49.720$ the cumulative risk is close to 50% and

NOTE Confidence: 0.9402536

 $00:28:49.720 \longrightarrow 00:28:54.000$ the curve is really bumping upwards.

NOTE Confidence: 0.9402536

 $00:28:54.000 \longrightarrow 00:28:57.640$ However, the diagnosis remains problematic.

NOTE Confidence: 0.9402536

00:28:57.640 --> 00:28:59.700 Here's just a recent

NOTE Confidence: 0.9402536

00:28:59.700 --> 00:29:01.760 study got 4 pathologists,

NOTE Confidence: 0.9402536

 $00{:}29{:}01.760 \dashrightarrow 00{:}29{:}03.376$ including a gynecological pathologist.

NOTE Confidence: 0.9402536

00:29:03.376 --> 00:29:05.800 The Scala was that gynecological pathologist.

NOTE Confidence: 0.9402536

 $00{:}29{:}05.800 \dashrightarrow 00{:}29{:}08.364$ He's got 2 dermatopathologist

NOTE Confidence: 0.9402536

 $00:29:08.364 \longrightarrow 00:29:10.928$ and one general pathologist.

NOTE Confidence: 0.9402536

 $00:29:10.930 \longrightarrow 00:29:12.682$ And this is not even about

NOTE Confidence: 0.9402536

 $00{:}29{:}12.682 \dashrightarrow 00{:}29{:}14.090$ diagnosis of divine per se,

NOTE Confidence: 0.9402536

 $00:29:14.090 \longrightarrow 00:29:17.093$ or what relative value each observer assigns

NOTE Confidence: 0.9402536

00:29:17.093 --> 00:29:20.489 to each of these individual features.

 $00:29:20.490 \longrightarrow 00:29:22.698$ It was just are these features

NOTE Confidence: 0.9402536

 $00:29:22.698 \longrightarrow 00:29:23.802$ present or not?

NOTE Confidence: 0.9402536

00:29:23.810 --> 00:29:28.250 And even that resulted in not entirely

NOTE Confidence: 0.9402536

00:29:28.250 --> 00:29:30.850 reassuring Kappa values in terms

NOTE Confidence: 0.9402536

 $00:29:30.850 \longrightarrow 00:29:32.855$ of its observer reproducibility.

NOTE Confidence: 0.9402536

 $00:29:32.855 \longrightarrow 00:29:35.970$ But I think what most would agree

NOTE Confidence: 0.9402536

 $00:29:35.970 \longrightarrow 00:29:38.619$ on is that basically tepia.

NOTE Confidence: 0.9402536

 $00:29:38.620 \longrightarrow 00:29:40.930$ Is a requirement for the diagnosis

NOTE Confidence: 0.9402536

 $00:29:40.930 \longrightarrow 00:29:46.300$ of Divin and recently ISSVD had a a

NOTE Confidence: 0.9402536

00:29:46.300 --> 00:29:48.280 consensus document in which they made

NOTE Confidence: 0.9402536

 $00{:}29{:}48.345 \dashrightarrow 00{:}29{:}50.553$ that point that the diagnostic features

NOTE Confidence: 0.9402536

 $00:29:50.553 \longrightarrow 00:29:53.262$ of Divin would be Basilatipia and they

NOTE Confidence: 0.9402536

00:29:53.262 --> 00:29:55.978 defined that which I should talk about,

NOTE Confidence: 0.9402536

 $00:29:55.980 \longrightarrow 00:29:56.286$ Yeah,

NOTE Confidence: 0.9402536

 $00:29:56.286 \longrightarrow 00:29:58.734$ the case also needs to be P16 negative,

 $00:29:58.740 \longrightarrow 00:30:01.056$ P53 kind of wild type or

NOTE Confidence: 0.9402536

 $00{:}30{:}01.056 \dashrightarrow 00{:}30{:}02.214$ mutational type staining,

NOTE Confidence: 0.9402536

 $00:30:02.220 \longrightarrow 00:30:05.320$ they mentioned that their supportive

NOTE Confidence: 0.9402536

 $00:30:05.320 \longrightarrow 00:30:05.940$ features.

NOTE Confidence: 0.9402536

00:30:05.940 --> 00:30:06.588 You know,

NOTE Confidence: 0.9402536

00:30:06.588 --> 00:30:09.180 all of which are sort of well recognized,

NOTE Confidence: 0.9402536

 $00{:}30{:}09.180 \dashrightarrow 00{:}30{:}12.072$ but they have to do with most of

NOTE Confidence: 0.9402536

00:30:12.072 --> 00:30:14.602 the keratinized and subtypes into

NOTE Confidence: 0.9402536

 $00:30:14.602 \longrightarrow 00:30:16.660$ cellular breakdown into cellular

NOTE Confidence: 0.9402536

 $00:30:16.660 \longrightarrow 00:30:18.740$ vacuoles and prematural maturation.

NOTE Confidence: 0.9402536

 $00{:}30{:}18.740 \dashrightarrow 00{:}30{:}20.750$ So if we consider the supportive

NOTE Confidence: 0.9402536

 $00:30:20.750 \longrightarrow 00:30:23.010$ features first here you can

NOTE Confidence: 0.9402536

 $00{:}30{:}23.010 \dashrightarrow 00{:}30{:}25.660$ see that there's basal etipia.

NOTE Confidence: 0.9402536

 $00:30:25.660 \longrightarrow 00:30:28.198$ Focal And then there's what they

NOTE Confidence: 0.9402536

00:30:28.198 --> 00:30:30.857 refer to in the ***** context

NOTE Confidence: 0.9402536

 $00{:}30{:}30{:}857 \dashrightarrow 00{:}30{:}33.042$ that this keratosis or premature

 $00:30:33.042 \longrightarrow 00:30:35.221$ meteoration which terms that may

NOTE Confidence: 0.9402536

00:30:35.221 --> 00:30:37.016 be used differently in Dermpa,

NOTE Confidence: 0.9402536

 $00:30:37.020 \longrightarrow 00:30:39.440$ but that's how they've been

NOTE Confidence: 0.9402536

 $00:30:39.440 \longrightarrow 00:30:41.376$ used traditionally in *****.

NOTE Confidence: 0.9402536

 $00:30:41.380 \longrightarrow 00:30:44.680$ And you can see that the the epidermis

NOTE Confidence: 0.9402536

00:30:44.680 --> 00:30:46.730 turns pink immediately after the

NOTE Confidence: 0.9402536

 $00:30:46.730 \longrightarrow 00:30:49.862$ basal layer and then there was this

NOTE Confidence: 0.9402536

 $00:30:49.862 \longrightarrow 00:30:51.690$ splengiosis like degenerative changes

NOTE Confidence: 0.9402536

 $00:30:51.690 \longrightarrow 00:30:54.456$ and vacuous that are present within it.

NOTE Confidence: 0.9402536

00:30:54.460 --> 00:30:56.700 Regarding the main thing though,

NOTE Confidence: 0.9402536

 $00:30:56.700 \longrightarrow 00:30:58.684$ which is a typia,

NOTE Confidence: 0.9402536

00:30:58.684 --> 00:31:00.668 they listed criteria including

NOTE Confidence: 0.9402536

 $00{:}31{:}00.668 {\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}} 00{:}31{:}02.044$ chromatin problems, hypochromasia,

NOTE Confidence: 0.9402536

 $00:31:02.044 \longrightarrow 00:31:02.812$ nuclear enlargement,

NOTE Confidence: 0.9402536

 $00:31:02.812 \longrightarrow 00:31:05.500$ something three times the size of a

00:31:05.558 --> 00:31:07.668 lymphocyte or that's obviously different

NOTE Confidence: 0.9402536

 $00:31:07.668 \longrightarrow 00:31:09.778$ than background or some pleomorphism.

NOTE Confidence: 0.9402536

 $00{:}31{:}09.780 \dashrightarrow 00{:}31{:}12.000$ We talk about common features

NOTE Confidence: 0.9402536

 $00:31:12.000 \longrightarrow 00:31:13.776$ and less common appearances,

NOTE Confidence: 0.9402536

 $00:31:13.780 \longrightarrow 00:31:15.658$ so of course something like this.

NOTE Confidence: 0.9402536

 $00:31:15.660 \longrightarrow 00:31:18.180$ We can all probably agree that this is given.

NOTE Confidence: 0.9402536

 $00:31:18.180 \longrightarrow 00:31:19.980$ This is click up based on the Typia,

NOTE Confidence: 0.86603416375

 $00:31:19.980 \longrightarrow 00:31:22.204$ it has two features,

NOTE Confidence: 0.86603416375

 $00:31:22.204 \longrightarrow 00:31:24.428$ hyperchromasia and nuclear enlargement.

NOTE Confidence: 0.86603416375

 $00:31:24.430 \longrightarrow 00:31:25.980$ And so everyone would agree

NOTE Confidence: 0.86603416375

 $00:31:25.980 \longrightarrow 00:31:26.910$ that that's basilatipia.

NOTE Confidence: 0.86603416375

00:31:26.910 --> 00:31:28.215 It's pretty true.

NOTE Confidence: 0.86603416375

 $00:31:28.215 \longrightarrow 00:31:31.275$ Maturation loss of a granular layer and

NOTE Confidence: 0.86603416375

 $00:31:31.275 \longrightarrow 00:31:33.945$ this is the so-called hypertrophic variant.

NOTE Confidence: 0.86603416375

00:31:33.950 --> 00:31:35.948 And this is another hypertrophic variant.

NOTE Confidence: 0.86603416375

 $00{:}31{:}35.950 \dashrightarrow 00{:}31{:}37.950$ The basilatipia is more subtle,

 $00:31:37.950 \longrightarrow 00:31:39.134$ but clearly still present.

NOTE Confidence: 0.86603416375

 $00{:}31{:}39.134 \dashrightarrow 00{:}31{:}42.541$ At the tip of this arrows you can see some

NOTE Confidence: 0.86603416375

 $00:31:42.541 \longrightarrow 00:31:44.109$ nuclear enlargement and hypochronesia.

NOTE Confidence: 0.86603416375

 $00:31:44.110 \longrightarrow 00:31:46.035$ Here's one where the granular

NOTE Confidence: 0.86603416375

 $00:31:46.035 \longrightarrow 00:31:47.688$ layer is preserved, but still.

NOTE Confidence: 0.86603416375

 $00:31:47.688 \longrightarrow 00:31:49.431$ We can appreciate at the tip of

NOTE Confidence: 0.86603416375

 $00:31:49.431 \longrightarrow 00:31:51.703$ this iris that there's a nuclear

NOTE Confidence: 0.86603416375

 $00:31:51.703 \longrightarrow 00:31:52.879$ enlargement and hypochromesure,

NOTE Confidence: 0.86603416375

 $00:31:52.880 \longrightarrow 00:31:55.040$ and also notice the background

NOTE Confidence: 0.86603416375

 $00{:}31{:}55.040 \dashrightarrow 00{:}31{:}56.768$ of Michael sclerosis that's

NOTE Confidence: 0.86603416375

 $00{:}31{:}56.768 \dashrightarrow 00{:}31{:}58.917$ seen in this particular area.

NOTE Confidence: 0.86603416375

 $00:31:58.920 \longrightarrow 00:32:01.476$ Here's more of the conventional book

NOTE Confidence: 0.86603416375

 $00{:}32{:}01.476 \dashrightarrow 00{:}32{:}03.180$ where there's irregularly irregular

NOTE Confidence: 0.86603416375

 $00:32:03.243 \longrightarrow 00:32:05.368$ what they call basal disarray and

NOTE Confidence: 0.86603416375

 $00:32:05.368 \longrightarrow 00:32:07.708$ announced the most Inritti and basal.

 $00:32:07.708 \longrightarrow 00:32:09.478$ The tip here of course,

NOTE Confidence: 0.86603416375

 $00:32:09.480 \dashrightarrow 00:32:12.120$ and degenerative changes as shown here.

NOTE Confidence: 0.86603416375

 $00:32:12.120 \longrightarrow 00:32:13.597$ This is species the three I HC.

NOTE Confidence: 0.948487290909091

 $00:32:16.220 \longrightarrow 00:32:17.885$ There's one where the basaltipia

NOTE Confidence: 0.948487290909091

 $00:32:17.885 \longrightarrow 00:32:20.020$ is getting more and more subtle,

NOTE Confidence: 0.948487290909091

 $00:32:20.020 \longrightarrow 00:32:21.791$ but a high magnification then one can

NOTE Confidence: 0.948487290909091

 $00:32:21.791 \longrightarrow 00:32:23.620$ still get to differentiated then,

NOTE Confidence: 0.948487290909091

 $00:32:23.620 \longrightarrow 00:32:24.620$ especially if you focus on.

NOTE Confidence: 0.948487290909091

 $00{:}32{:}24.620 \dashrightarrow 00{:}32{:}26.097$ For example, look at the tip of

NOTE Confidence: 0.948487290909091

 $00:32:26.097 \longrightarrow 00:32:27.500$ the arrow in the lower left,

NOTE Confidence: 0.948487290909091

 $00{:}32{:}27.500 \to 00{:}32{:}29.768$ you can appreciate some basaltipia that's

NOTE Confidence: 0.948487290909091

00:32:29.768 --> 00:32:31.780 currently present in these lesions.

NOTE Confidence: 0.948487290909091

 $00:32:31.780 \longrightarrow 00:32:32.784$ On the other hand,

NOTE Confidence: 0.948487290909091

 $00:32:32.784 \longrightarrow 00:32:33.537$ something like this,

NOTE Confidence: 0.948487290909091

 $00:32:33.540 \longrightarrow 00:32:36.088$ which to my eye does not have

NOTE Confidence: 0.948487290909091

00:32:36.088 --> 00:32:37.862 basaltipia but low and behold

 $00:32:37.862 \longrightarrow 00:32:40.860$ turns out to be a P53 abnormal,

NOTE Confidence: 0.948487290909091

 $00:32:40.860 \dashrightarrow 00:32:45.500$ the so-called subtle variant of DV.

NOTE Confidence: 0.948487290909091

00:32:45.500 --> 00:32:46.544 Which you know,

NOTE Confidence: 0.948487290909091

 $00:32:46.544 \longrightarrow 00:32:48.632$ sometimes you can sort of your

NOTE Confidence: 0.948487290909091

 $00:32:48.632 \longrightarrow 00:32:50.635$ yourself way out of being able

NOTE Confidence: 0.948487290909091

 $00:32:50.635 \longrightarrow 00:32:52.220$ to diagnose the whole thing.

NOTE Confidence: 0.948487290909091

00:32:52.220 --> 00:32:54.340 But in anyway my to my eye this is not

NOTE Confidence: 0.948487290909091

 $00:32:54.396 \longrightarrow 00:32:56.736$ quite diagnostic at the morphologic level,

NOTE Confidence: 0.948487290909091

 $00:32:56.740 \longrightarrow 00:32:59.629$ but it is the event and so the so-called

NOTE Confidence: 0.948487290909091

 $00:32:59.629 \longrightarrow 00:33:02.220$ sort of variant and there are other variants.

NOTE Confidence: 0.948487290909091

 $00:33:02.220 \longrightarrow 00:33:03.798$ This is atrophic variant to shown

NOTE Confidence: 0.948487290909091

 $00{:}33{:}03.798 \dashrightarrow 00{:}33{:}05.486$ on the left is more a cantalytic

NOTE Confidence: 0.948487290909091

 $00{:}33{:}05.486 \dashrightarrow 00{:}33{:}07.806$ that's shown on the far right is the

NOTE Confidence: 0.948487290909091

 $00:33:07.867 \longrightarrow 00:33:10.057$ apotrophic examples of which have shown.

NOTE Confidence: 0.948487290909091

 $00:33:10.060 \longrightarrow 00:33:11.940$ And here's the intermediate.

00:33:11.940 --> 00:33:12.410 Invariant,

NOTE Confidence: 0.948487290909091

 $00:33:12.410 \longrightarrow 00:33:15.322$ the one that looks sort of halfway in

NOTE Confidence: 0.948487290909091

 $00:33:15.322 \longrightarrow 00:33:17.769$ between something that's completely mature,

NOTE Confidence: 0.948487290909091

 $00:33:17.770 \longrightarrow 00:33:20.178$ premature maturation and all that and

NOTE Confidence: 0.948487290909091

 $00:33:20.178 \longrightarrow 00:33:21.810$ something that's visible looking.

NOTE Confidence: 0.948487290909091

 $00:33:21.810 \longrightarrow 00:33:24.530$ And this is a so-called intermediate variant.

NOTE Confidence: 0.948487290909091

00:33:24.530 --> 00:33:26.930 Most of them are non keratinizing,

NOTE Confidence: 0.948487290909091

 $00:33:26.930 \longrightarrow 00:33:29.370$ but they're also keratinizing variants.

NOTE Confidence: 0.948487290909091

 $00{:}33{:}29.370 \dashrightarrow 00{:}33{:}31.890$ So here's an intermediate keratinizing.

NOTE Confidence: 0.948487290909091

 $00:33:31.890 \longrightarrow 00:33:34.080$ You can see it's clinically a

NOTE Confidence: 0.948487290909091

 $00{:}33{:}34.080 \dashrightarrow 00{:}33{:}35.860$ discrete lesion between the blue

NOTE Confidence: 0.948487290909091

 $00:33:35.860 \longrightarrow 00:33:37.610$ Marks and a high magnification.

NOTE Confidence: 0.948487290909091

00:33:37.610 --> 00:33:39.310 It looks like it's not

NOTE Confidence: 0.948487290909091

 $00:33:39.310 \longrightarrow 00:33:41.090$ quite mature in in well.

NOTE Confidence: 0.948487290909091

 $00:33:41.090 \longrightarrow 00:33:42.530$ It's very minimal base

NOTE Confidence: 0.948487290909091

 $00:33:42.530 \longrightarrow 00:33:44.597$ of the tippy eye to see.

 $00:33:44.600 \longrightarrow 00:33:47.993$ To my eye, MP53 lights up that whole area.

NOTE Confidence: 0.911129407142857

00:33:50.760 --> 00:33:53.931 Just like there is a divin like

NOTE Confidence: 0.911129407142857

 $00:33:53.931 \longrightarrow 00:33:57.357$ pattern of H cell as shown here,

NOTE Confidence: 0.911129407142857

 $00:33:57.360 \longrightarrow 00:34:00.160$ there is there is also H

NOTE Confidence: 0.911129407142857

 $00:34:00.160 \longrightarrow 00:34:01.560$ cell like pattern of divin,

NOTE Confidence: 0.911129407142857

 $00:34:01.560 \longrightarrow 00:34:03.968$ the so-called basaloid divin

NOTE Confidence: 0.911129407142857

 $00:34:03.968 \longrightarrow 00:34:06.978$ wherein the epidermis is entirely

NOTE Confidence: 0.911129407142857

 $00:34:06.978 \longrightarrow 00:34:10.440$ basiloid and immature looking.

NOTE Confidence: 0.911129407142857

 $00:34:10.440 \longrightarrow 00:34:12.519$ But then you do P53 lights up,

NOTE Confidence: 0.911129407142857

 $00:34:12.520 \longrightarrow 00:34:13.885$ P16 is negative.

NOTE Confidence: 0.911129407142857

00:34:13.885 --> 00:34:16.960 I have not had the misfortune of

NOTE Confidence: 0.911129407142857

 $00:34:16.960 \longrightarrow 00:34:20.160$ identifying a basil or divine in a biopsy.

NOTE Confidence: 0.911129407142857

 $00{:}34{:}20.160 {\:{\mbox{--}}\!>}\ 00{:}34{:}21.918$ Every case of saying has been

NOTE Confidence: 0.911129407142857

 $00{:}34{:}21.920 \dashrightarrow 00{:}34{:}23.560$ adjacent to her invasive cancer,

NOTE Confidence: 0.911129407142857

 $00:34:23.560 \longrightarrow 00:34:27.277$ which of course helps with the diagnosis.

 $00:34:27.280 \longrightarrow 00:34:28.744$ With respect to immunos,

NOTE Confidence: 0.911129407142857

 $00:34:28.744 \longrightarrow 00:34:29.476$ to chemistry,

NOTE Confidence: 0.935557274

 $00:34:31.520 \longrightarrow 00:34:33.730$ the main point of controversy

NOTE Confidence: 0.935557274

 $00:34:33.730 \longrightarrow 00:34:36.528$ is whether or not there is a

NOTE Confidence: 0.935557274

 $00:34:36.528 \longrightarrow 00:34:39.636$ thing as a P53 wild type divine.

NOTE Confidence: 0.935557274

 $00:34:39.636 \longrightarrow 00:34:41.992$ The literature suggests that

NOTE Confidence: 0.935557274

 $00:34:41.992 \longrightarrow 00:34:45.692$ there is because any up to 35% of

NOTE Confidence: 0.935557274

00:34:45.692 --> 00:34:47.858 cases of reported cases of Divin

NOTE Confidence: 0.935557274

 $00:34:47.858 \longrightarrow 00:34:50.274$ in the literature, P53 wild type.

NOTE Confidence: 0.935557274

 $00:34:50.274 \longrightarrow 00:34:51.762$ But of course there's a little

NOTE Confidence: 0.935557274

 $00:34:51.762 \longrightarrow 00:34:53.130$ bit of circularity there,

NOTE Confidence: 0.935557274

00:34:53.130 --> 00:34:55.260 you know it's called Divin

NOTE Confidence: 0.935557274

 $00:34:55.260 \longrightarrow 00:34:57.890$ even though it's P53 wild type.

NOTE Confidence: 0.935557274

 $00:34:57.890 \longrightarrow 00:34:59.840$ Divin is difficult to diagnose

NOTE Confidence: 0.935557274

 $00:34:59.840 \longrightarrow 00:35:01.428$ by morphology alone, you know.

NOTE Confidence: 0.935557274

 $00{:}35{:}01.428 \dashrightarrow 00{:}35{:}02.891$ So there's a there's a little bit

 $00:35:02.891 \longrightarrow 00:35:04.338$ of circularity in that event.

NOTE Confidence: 0.935557274

 $00:35:04.340 \longrightarrow 00:35:06.420$ That's what the literature indicates,

NOTE Confidence: 0.935557274

 $00:35:06.420 \longrightarrow 00:35:09.156$ that you can't have P 53 Watt type

NOTE Confidence: 0.935557274

 $00:35:09.156 \longrightarrow 00:35:11.004$ and ISSVD certainly supports that.

NOTE Confidence: 0.935557274

 $00{:}35{:}11.004 \dashrightarrow 00{:}35{:}14.569$ And I and I also know from my personal

NOTE Confidence: 0.935557274

 $00:35:14.569 \longrightarrow 00:35:17.041$ experience that I've seen cases that

NOTE Confidence: 0.935557274

00:35:17.041 --> 00:35:19.912 are classical Divin with clear cut

NOTE Confidence: 0.935557274

 $00:35:19.912 \longrightarrow 00:35:22.297$ bisalitipia that are P53 wildfires.

NOTE Confidence: 0.935557274

 $00:35:22.300 \longrightarrow 00:35:23.500$ So I know it occurs

NOTE Confidence: 0.946657697272727

 $00:35:25.860 \longrightarrow 00:35:27.428$ with respect to interpretation.

NOTE Confidence: 0.946657697272727

00:35:27.428 --> 00:35:30.380 The same study that I cited earlier,

NOTE Confidence: 0.946657697272727

 $00{:}35{:}30.380 \dashrightarrow 00{:}35{:}32.530$ Trisi and Clute also talked

NOTE Confidence: 0.946657697272727

 $00{:}35{:}32.530 \dashrightarrow 00{:}35{:}34.680$ about the side two patterns.

NOTE Confidence: 0.946657697272727

 $00:35:34.680 \longrightarrow 00:35:36.852$ Including staining of the base that

NOTE Confidence: 0.946657697272727

 $00:35:36.852 \longrightarrow 00:35:38.687$ extends upward the so-called part

00:35:38.687 --> 00:35:40.940 of basil diffuse pattern or basil

NOTE Confidence: 0.946657697272727

 $00:35:40.940 \longrightarrow 00:35:43.760$ only staining just the base only,

NOTE Confidence: 0.946657697272727

 $00:35:43.760 \longrightarrow 00:35:45.065$ not extending upwards.

NOTE Confidence: 0.946657697272727

 $00:35:45.065 \longrightarrow 00:35:47.240$ A subset of these are

NOTE Confidence: 0.946657697272727

 $00:35:47.240 \longrightarrow 00:35:49.280$ associated with a P53 mutation,

NOTE Confidence: 0.946657697272727

00:35:49.280 --> 00:35:51.524 but it's a nonspecific staining pattern

NOTE Confidence: 0.946657697272727

 $00:35:51.524 \longrightarrow 00:35:54.720$ and you get the null in the cytoplasmic.

NOTE Confidence: 0.946657697272727

 $00:35:54.720 \longrightarrow 00:35:56.238$ The mid epithelia of basal sparing.

NOTE Confidence: 0.946657697272727

 $00:35:56.240 \longrightarrow 00:35:58.235$ I showed images before when there's no

NOTE Confidence: 0.946657697272727

00:35:58.235 --> 00:36:00.556 staining at the base even though the

NOTE Confidence: 0.946657697272727

 $00{:}36{:}00.556 \dashrightarrow 00{:}36{:}02.316$ epithelium itself is strongly staining.

NOTE Confidence: 0.946657697272727

 $00:36:02.320 \longrightarrow 00:36:03.958$ These are wild type staining pattern,

NOTE Confidence: 0.946657697272727

 $00:36:03.960 \longrightarrow 00:36:05.752$ but the more common wild type staining

NOTE Confidence: 0.946657697272727

 $00{:}36{:}05.752 \dashrightarrow 00{:}36{:}07.491$ pattern is when you have sporadic

NOTE Confidence: 0.946657697272727

00:36:07.491 --> 00:36:10.596 staining as shown in the left image.

NOTE Confidence: 0.946657697272727

 $00:36:10.600 \longrightarrow 00:36:13.870$ Now of course in real life

 $00:36:13.870 \longrightarrow 00:36:17.000$ it's never perfect.

NOTE Confidence: 0.946657697272727

 $00:36:17.000 \longrightarrow 00:36:18.785$ Everyone can recognize the clay

NOTE Confidence: 0.946657697272727

 $00:36:18.785 \longrightarrow 00:36:20.570$ cut wild type staining patterns.

NOTE Confidence: 0.946657697272727

 $00:36:20.570 \longrightarrow 00:36:22.012$ And then there's some cases that it

NOTE Confidence: 0.946657697272727

00:36:22.012 --> 00:36:23.410 looks like it's extending upwards,

NOTE Confidence: 0.946657697272727

 $00:36:23.410 \longrightarrow 00:36:26.194$ but it's in a discrete area

NOTE Confidence: 0.946657697272727

 $00:36:26.194 \longrightarrow 00:36:28.050$ without a morphological correlate.

NOTE Confidence: 0.946657697272727

 $00:36:28.050 \longrightarrow 00:36:28.842$ In other words,

NOTE Confidence: 0.946657697272727

 $00:36:28.842 \longrightarrow 00:36:30.690$ that area is not atypical at all.

NOTE Confidence: 0.946657697272727

 $00:36:30.690 \longrightarrow 00:36:34.274$ Or when you have strong staining that

NOTE Confidence: 0.946657697272727

00:36:34.274 --> 00:36:37.282 doesn't extend upwards and it's like okay.

NOTE Confidence: 0.946657697272727

 $00:36:37.282 \longrightarrow 00:36:40.240$ What do we do with that?

NOTE Confidence: 0.946657697272727

 $00{:}36{:}40.240 \dashrightarrow 00{:}36{:}43.200$ Seems stronger than expected.

$$\begin{split} & \text{NOTE Confidence: } 0.946657697272727\\ & 00:36:43.200 --> 00:36:43.568 \text{ And again,}\\ & \text{NOTE Confidence: } 0.946657697272727\\ & 00:36:43.568 --> 00:36:44.120 \text{ like I said,} \end{split}$$

 $00:36:44.120 \longrightarrow 00:36:45.640$ that has been associated with

NOTE Confidence: 0.946657697272727

 $00{:}36{:}45.640 \dashrightarrow 00{:}36{:}47.760$ the presence of a P53 mutation.

NOTE Confidence: 0.946657697272727

 $00:36:47.760 \longrightarrow 00:36:49.713$ But you can also see them when

NOTE Confidence: 0.946657697272727

 $00:36:49.713 \longrightarrow 00:36:51.040$ P53 mutation is absent,

NOTE Confidence: 0.946657697272727

00:36:51.040 --> 00:36:53.679 as in like in sclerosis or liking

NOTE Confidence: 0.946657697272727

 $00:36:53.680 \longrightarrow 00:36:55.850$ simplex chronicles or other even

NOTE Confidence: 0.946657697272727

 $00{:}36{:}55.850 \dashrightarrow 00{:}36{:}58.020$ spongeotic dermatitis cases you can

NOTE Confidence: 0.946657697272727

 $00:36:58.091 \longrightarrow 00:37:00.198$ you can see that pattern as well.

NOTE Confidence: 0.946657697272727

 $00{:}37{:}00.200 \longrightarrow 00{:}37{:}02.072$ Or when the standing of the

NOTE Confidence: 0.946657697272727

 $00:37:02.072 \longrightarrow 00:37:03.920$ base and it extends upwards,

NOTE Confidence: 0.946657697272727

 $00{:}37{:}03.920 --> 00{:}37{:}06.248$ but in a kind of a wimpy way.

NOTE Confidence: 0.946657697272727

 $00:37:06.250 \longrightarrow 00:37:08.689$ Slightly and then like what to do with that.

NOTE Confidence: 0.946657697272727

 $00{:}37{:}08.690 \dashrightarrow 00{:}37{:}10.657$ So in these scenarios it would be

NOTE Confidence: 0.946657697272727

 $00:37:10.657 \longrightarrow 00:37:12.725$ nice to have additional markers to

NOTE Confidence: 0.946657697272727

 $00:37:12.725 \longrightarrow 00:37:15.047$ assist with the diagnosis of Divin.

NOTE Confidence: 0.946657697272727

 $00:37:15.050 \longrightarrow 00:37:18.566$ Unfortunately these markers are not great.

 $00:37:18.570 \longrightarrow 00:37:20.670$ All the markers that have been

NOTE Confidence: 0.946657697272727

 $00:37:20.670 \longrightarrow 00:37:22.355$ proffered and listed here that

NOTE Confidence: 0.946657697272727

 $00:37:22.355 \longrightarrow 00:37:26.090$ are aware of 1 P CK13CK17 sorts 2.

NOTE Confidence: 0.946657697272727

 $00:37:26.090 \longrightarrow 00:37:27.786$ They're just not ideal.

NOTE Confidence: 0.946657697272727

 $00:37:27.786 \longrightarrow 00:37:30.330$ They each have their own problems.

NOTE Confidence: 0.946657697272727

 $00:37:30.330 \longrightarrow 00:37:31.630$ For the main differential,

NOTE Confidence: 0.946657697272727

00:37:31.630 --> 00:37:34.370 we don't really care about Divin versus H,

NOTE Confidence: 0.94665769727272700:37:34.370 --> 00:37:35.966 so per se. NOTE Confidence: 0.946657697272727

 $00:37:35.966 \dashrightarrow 00:37:40.540$ We care mostly about D Vin versus Lycos,

NOTE Confidence: 0.946657697272727

 $00{:}37{:}40.540 \dashrightarrow 00{:}37{:}44.220$ non putative non neoplastic lesions,

NOTE Confidence: 0.946657697272727

00:37:44.220 --> 00:37:45.180 inflammatory disorders,

NOTE Confidence: 0.946657697272727

 $00:37:45.180 \longrightarrow 00:37:48.060$ that's really what the issue is.

NOTE Confidence: 0.946657697272727

00:37:48.060 --> 00:37:49.866 The one that does show the

NOTE Confidence: 0.946657697272727

 $00:37:49.866 \longrightarrow 00:37:51.660$ most promise is got a three.

NOTE Confidence: 0.946657697272727

 $00:37:51.660 \longrightarrow 00:37:53.557$ Got a three was initially reported by

 $00:37:53.557 \dashrightarrow 00:37:55.523$ Dean Yang from the Cleveland Clinic a

NOTE Confidence: 0.946657697272727

00:37:55.523 --> 00:37:58.192 couple of years ago as being lost in

NOTE Confidence: 0.946657697272727

 $00:37:58.192 \dashrightarrow 00:38:01.379$ the basal and para basal layers of D Vin.

NOTE Confidence: 0.946657697272727

 $00:38:01.380 \longrightarrow 00:38:03.578$ Got a three is normally expressed in

NOTE Confidence: 0.946657697272727

 $00:38:03.578 \dashrightarrow 00:38:05.098$ the epidermis expressed in H cell.

NOTE Confidence: 0.946657697272727

00:38:05.100 --> 00:38:07.168 Difusely, but in Divin,

NOTE Confidence: 0.946657697272727

 $00:38:07.168 \longrightarrow 00:38:10.867$ apparently it's lost in the basal layer

NOTE Confidence: 0.946657697272727

 $00:38:10.867 \dashrightarrow 00:38:13.897$ and the parabasal layers as well.

NOTE Confidence: 0.946657697272727

 $00:38:13.900 \longrightarrow 00:38:16.686$ So we examined this and we found

NOTE Confidence: 0.946657697272727

 $00:38:16.686 \longrightarrow 00:38:18.660$ it to be useful.

NOTE Confidence: 0.946657697272727 00:38:18.660 --> 00:38:19.378 You know, NOTE Confidence: 0.946657697272727

 $00:38:19.378 \longrightarrow 00:38:22.250$ this is 19 out of 25 cases showed

NOTE Confidence: 0.946657697272727

 $00{:}38{:}22.337 \dashrightarrow 00{:}38{:}25.360$ greater than 75% of cells lost in

NOTE Confidence: 0.946657697272727

 $00:38:25.360 \longrightarrow 00:38:27.380$ the basal and parabasal regions,

NOTE Confidence: 0.946657697272727

 $00:38:27.380 \longrightarrow 00:38:30.539$ but that still is 2 out of the 25

NOTE Confidence: 0.946657697272727

 $00{:}38{:}30.539 \dashrightarrow 00{:}38{:}32.870$ cases that had no loss what soever.

 $00:38:32.870 \longrightarrow 00:38:36.590$ We also found a lot of the VIN threes

NOTE Confidence: 0.946657697272727

 $00:38:36.590 \dashrightarrow 00:38:40.190$ showed some loss in a partial or complete.

NOTE Confidence: 0.941027707692307

00:38:40.190 --> 00:38:42.366 But what is useful is that a lot

NOTE Confidence: 0.941027707692307

 $00:38:42.366 \longrightarrow 00:38:43.986$ of dermatosis like in sclerosis

NOTE Confidence: 0.941027707692307

 $00{:}38{:}43.986 \dashrightarrow 00{:}38{:}46.008$ like in Simplex Chronicus and a

NOTE Confidence: 0.941027707692307

 $00:38:46.008 \longrightarrow 00:38:48.067$ variety of others did not show loss.

NOTE Confidence: 0.941027707692307

 $00:38:48.070 \longrightarrow 00:38:50.414$ We had a rare case that we were

NOTE Confidence: 0.941027707692307

 $00:38:50.414 \longrightarrow 00:38:52.029$ convinced does not have Divin.

NOTE Confidence: 0.941027707692307

 $00:38:52.030 \longrightarrow 00:38:55.108$ These are all P53 wall type by the way

NOTE Confidence: 0.941027707692307

00:38:55.108 --> 00:38:57.548 and P16 negative we were convinced,

NOTE Confidence: 0.941027707692307

 $00:38:57.548 \longrightarrow 00:39:00.060$ not sure divin but still short

NOTE Confidence: 0.941027707692307

 $00:39:00.060 \longrightarrow 00:39:03.000$ loss of of this markers.

NOTE Confidence: 0.941027707692307

 $00{:}39{:}03.000 \dashrightarrow 00{:}39{:}05.064$ So the overall problems can be

NOTE Confidence: 0.941027707692307

 $00:39:05.064 \dashrightarrow 00:39:06.863$ summarized as in sometimes you

NOTE Confidence: 0.941027707692307

 $00:39:06.863 \longrightarrow 00:39:08.673$ have weak expression throughout the

00:39:08.673 --> 00:39:10.848 epidemics and so you can't tell

NOTE Confidence: 0.941027707692307

 $00:39:10.848 \longrightarrow 00:39:12.840$ whether there's loss in the base.

NOTE Confidence: 0.941027707692307

 $00:39:12.840 \longrightarrow 00:39:13.692$ And like I said,

NOTE Confidence: 0.941027707692307

 $00:39:13.692 \dashrightarrow 00:39:15.985$ about 10% of cases show normal expression

NOTE Confidence: 0.941027707692307

 $00:39:15.985 \longrightarrow 00:39:18.600$ or defiant cases show normal expression.

NOTE Confidence: 0.941027707692307

 $00:39:18.600 \longrightarrow 00:39:19.460$ And then there's this

NOTE Confidence: 0.941027707692307

 $00:39:19.460 \longrightarrow 00:39:20.320$ question of partial loss.

NOTE Confidence: 0.941027707692307

 $00:39:20.320 \longrightarrow 00:39:22.240$ What is partial indeed the,

NOTE Confidence: 0.941027707692307

 $00:39:22.240 \dashrightarrow 00:39:24.040$ you know, we use this numbers

NOTE Confidence: 0.941027707692307

 $00:39:24.040 \longrightarrow 00:39:26.200$ 25 to 75% what is you know,

NOTE Confidence: 0.941027707692307

 $00{:}39{:}26.200 \dashrightarrow 00{:}39{:}28.430$ I hate any sort of.

NOTE Confidence: 0.941027707692307

 $00:39:28.430 \longrightarrow 00:39:30.824$ Markers that need to be interpreted

NOTE Confidence: 0.941027707692307

 $00:39:30.824 \longrightarrow 00:39:33.334$ with numbers in that way and so it

NOTE Confidence: 0.941027707692307

 $00:39:33.334 \dashrightarrow 00:39:35.115$ just you know it it's it's a problem

NOTE Confidence: 0.941027707692307

 $00:39:35.115 \longrightarrow 00:39:36.956$ but at least it's the one that

NOTE Confidence: 0.941027707692307

 $00:39:36.956 \longrightarrow 00:39:38.728$ shows the most promise Any marker

 $00:39:38.728 \longrightarrow 00:39:41.256$ really has to be combined with P50

NOTE Confidence: 0.941027707692307

 $00{:}39{:}41.256 \dashrightarrow 00{:}39{:}45.748$ degree or and P16 really also in

NOTE Confidence: 0.941027707692307

 $00:39:45.748 \longrightarrow 00:39:48.022$ this space are these lesions they

NOTE Confidence: 0.941027707692307

 $00:39:48.022 \longrightarrow 00:39:50.301$ are controversial by the by the

NOTE Confidence: 0.941027707692307

 $00:39:50.301 \longrightarrow 00:39:52.150$ very nature especially recently or

NOTE Confidence: 0.941027707692307

 $00:39:52.150 \longrightarrow 00:39:54.642$ that are HP3 independent and P53

NOTE Confidence: 0.941027707692307

 $00:39:54.642 \longrightarrow 00:39:58.086$ wild type as I alluded to before.

NOTE Confidence: 0.941027707692307

 $00:39:58.090 \dashrightarrow 00:40:00.970$ Most cases of devane are diagnosed

NOTE Confidence: 0.941027707692307

 $00:40:00.970 \longrightarrow 00:40:02.890$ concurrent with invasive carcinoma,

NOTE Confidence: 0.941027707692307

 $00:40:02.890 \longrightarrow 00:40:04.714$ and when that happens,

NOTE Confidence: 0.941027707692307

 $00:40:04.714 \longrightarrow 00:40:07.330$ the P53 mutational status of the

NOTE Confidence: 0.941027707692307

 $00{:}40{:}07.330 \dashrightarrow 00{:}40{:}09.980$ invasive and inside 2 lesions match

NOTE Confidence: 0.941027707692307

 $00:40:09.980 \longrightarrow 00:40:12.830$ each other about 78% of the time,

NOTE Confidence: 0.941027707692307

 $00{:}40{:}12.830 \dashrightarrow 00{:}40{:}15.250$ and then the remaining 21% of

NOTE Confidence: 0.941027707692307

 $00:40:15.250 \longrightarrow 00:40:17.250$ the time there's a mismatch.

00:40:17.250 --> 00:40:18.900 And that invariably,

NOTE Confidence: 0.941027707692307

 $00:40:18.900 \longrightarrow 00:40:21.650$ according to one large study,

NOTE Confidence: 0.941027707692307

 $00:40:21.650 \longrightarrow 00:40:23.960$ is because the invasive cancer

NOTE Confidence: 0.941027707692307

 $00:40:23.960 \longrightarrow 00:40:25.346$ is P53 abnormal.

NOTE Confidence: 0.941027707692307

 $00:40:25.350 \longrightarrow 00:40:30.550$ Whereas the lesion adjacent is P53 wild type.

NOTE Confidence: 0.941027707692307

 $00:40:30.550 \longrightarrow 00:40:32.272$ Now that tells me two things in

NOTE Confidence: 0.941027707692307

 $00:40:32.272 \longrightarrow 00:40:34.087$ an excision if I see an insight

NOTE Confidence: 0.941027707692307

 $00:40:34.087 \longrightarrow 00:40:35.623$ to lesion that's at the margin.

NOTE Confidence: 0.941027707692307

 $00:40:35.630 \longrightarrow 00:40:37.590$ The fact that the P53 is different

NOTE Confidence: 0.941027707692307

 $00:40:37.590 \longrightarrow 00:40:41.126$ between the excision and the and the

NOTE Confidence: 0.941027707692307

 $00{:}40{:}41.126 {\:{\mbox{--}}\!\!>}\ 00{:}40{:}42.866$ putative precursor lesion doesn't mean

NOTE Confidence: 0.941027707692307

 $00:40:42.866 \longrightarrow 00:40:45.149$ I should ignore the precursor lesion.

NOTE Confidence: 0.941027707692307

 $00:40:45.150 \longrightarrow 00:40:47.210$ I would argue that you know that

NOTE Confidence: 0.941027707692307

00:40:47.210 --> 00:40:48.910 could still be very significant,

NOTE Confidence: 0.941027707692307

 $00:40:48.910 \longrightarrow 00:40:51.004$ but more importantly at this P53

NOTE Confidence: 0.941027707692307

 $00:40:51.004 \longrightarrow 00:40:53.393$ wild type insight to lesions that

 $00:40:53.393 \longrightarrow 00:40:55.237$ are adjacent invasive cancer.

NOTE Confidence: 0.941027707692307

 $00:40:55.240 \longrightarrow 00:40:57.040$ And what are they? Can they be recognized?

NOTE Confidence: 0.941027707692307

00:40:57.040 --> 00:40:59.890 What is the mutation that's happening

NOTE Confidence: 0.941027707692307

 $00:40:59.890 \longrightarrow 00:41:02.560$ with them of these lesions?

NOTE Confidence: 0.941027707692307

00:41:02.560 --> 00:41:04.680 Mutation of cancer fraction analysis,

NOTE Confidence: 0.941027707692307

 $00:41:04.680 \longrightarrow 00:41:07.460$ which as we all know has problems,

NOTE Confidence: 0.941027707692307

 $00:41:07.460 \longrightarrow 00:41:10.392$ but still have shown that perhaps

NOTE Confidence: 0.941027707692307

00:41:10.392 --> 00:41:13.308 the 53 is not the initiating event

NOTE Confidence: 0.941027707692307

 $00:41:13.308 \longrightarrow 00:41:15.996$ in this cremence across knowns that

NOTE Confidence: 0.941027707692307

00:41:16.000 --> 00:41:18.160 mutations in a NOx signaling pathway,

NOTE Confidence: 0.941027707692307

 $00:41:18.160 \longrightarrow 00:41:21.688$ 3rd and some others may come first.

NOTE Confidence: 0.941027707692307

00:41:21.690 --> 00:41:24.288 And then they acquire P53 later.

NOTE Confidence: 0.941027707692307

 $00:41:24.290 \longrightarrow 00:41:25.982$ The question is what is the

NOTE Confidence: 0.941027707692307

00:41:25.982 --> 00:41:27.702 morphology of those cases that don't

NOTE Confidence: 0.941027707692307

 $00:41:27.702 \longrightarrow 00:41:30.370$ have P53 but have other mutations?

00:41:30.370 --> 00:41:33.367 Does it just look like P53 rod type even?

NOTE Confidence: 0.941027707692307

00:41:33.370 --> 00:41:35.206 Does it look like something else?

NOTE Confidence: 0.941027707692307

 $00:41:35.210 \longrightarrow 00:41:36.590$ Does it look normal?

NOTE Confidence: 0.941027707692307

 $00:41:36.590 \longrightarrow 00:41:39.380$ And so that is the question and it's

NOTE Confidence: 0.941027707692307

 $00:41:39.380 \longrightarrow 00:41:41.964$ not a trivial 1 because like I said,

NOTE Confidence: 0.941027707692307

 $00:41:41.970 \longrightarrow 00:41:44.208$ a subset of **** cancers are

NOTE Confidence: 0.941027707692307

 $00:41:44.208 \longrightarrow 00:41:46.450$ HPV negative and P53 rod type.

NOTE Confidence: 0.941027707692307

 $00:41:46.450 \longrightarrow 00:41:48.814$ What is the precursor for those

NOTE Confidence: 0.941027707692307

 $00:41:48.814 \longrightarrow 00:41:50.390$ lesions and those lesions

NOTE Confidence: 0.952146640909091

00:41:50.459 --> 00:41:52.170 represent? Intermediate They

NOTE Confidence: 0.952146640909091

 $00{:}41{:}52.170 \dashrightarrow 00{:}41{:}54.210$ have intermediate prognosis and

NOTE Confidence: 0.952146640909091

 $00:41:54.210 \longrightarrow 00:41:58.558$ represent 15% of all Volvo cancers.

NOTE Confidence: 0.952146640909091

 $00{:}41{:}58.558 \dashrightarrow 00{:}42{:}02.242$ This HPV negative P53 wild time cases.

NOTE Confidence: 0.952146640909091

 $00:42:02.242 \longrightarrow 00:42:05.571$ So the question is what is the precursor

NOTE Confidence: 0.952146640909091

 $00:42:05.571 \longrightarrow 00:42:09.115$ lesion for this subset of cases and can

NOTE Confidence: 0.952146640909091

 $00:42:09.201 \longrightarrow 00:42:12.627$ that lesion be diagnosed by pathologists?

 $00:42:12.630 \longrightarrow 00:42:14.667$ There have been attempts to do so.

NOTE Confidence: 0.952146640909091

 $00{:}42{:}14.670 \dashrightarrow 00{:}42{:}17.400$ The first lesion that fits this bill.

NOTE Confidence: 0.952146640909091

00:42:17.400 --> 00:42:21.315 Was was reported on almost 20 years ago as

NOTE Confidence: 0.952146640909091

 $00:42:21.320 \longrightarrow 00:42:24.400$ low vikentosis with altered differentiation,

NOTE Confidence: 0.952146640909091

 $00:42:24.400 \longrightarrow 00:42:26.787$ which would be negative P53 well typed

NOTE Confidence: 0.952146640909091

 $00:42:26.787 \longrightarrow 00:42:29.137$ by definition a subset associated with

NOTE Confidence: 0.952146640909091

00:42:29.137 --> 00:42:31.855 like in sclerosis and by morphology.

NOTE Confidence: 0.952146640909091

 $00{:}42{:}31.855 \dashrightarrow 00{:}42{:}34.280$ They have the Russiform architecture,

NOTE Confidence: 0.952146640909091

 $00{:}42{:}34.280 \dashrightarrow 00{:}42{:}37.000$ they have stacked pyrokeratosis

NOTE Confidence: 0.952146640909091

 $00{:}42{:}37.000 \dashrightarrow 00{:}42{:}40.200$ and the whole spinosum seems

NOTE Confidence: 0.95232968

 $00{:}42{:}43.080 \dashrightarrow 00{:}42{:}46.176$ pale this pink appearance.

NOTE Confidence: 0.95232968

 $00:42:46.176 \longrightarrow 00:42:47.640$ Again, they don't have

NOTE Confidence: 0.95232968

 $00:42:47.640 \longrightarrow 00:42:48.790$ the features of the event,

NOTE Confidence: 0.95232968

 $00{:}42{:}48.790 \longrightarrow 00{:}42{:}52.306$ No basal etsypia to speak of.

NOTE Confidence: 0.95232968

 $00:42:52.310 \longrightarrow 00:42:54.188$ Not all cases are vertical recifonts.

 $00:42:54.190 \longrightarrow 00:42:55.582$ Some cases are more on the

NOTE Confidence: 0.95232968

00:42:55.582 --> 00:42:56.510 flattened end of stance,

NOTE Confidence: 0.95232968

 $00:42:56.510 \longrightarrow 00:42:59.330$ but clearly these cases are often times admix.

NOTE Confidence: 0.95232968

 $00:42:59.330 \longrightarrow 00:43:01.990$ You can notice the stacked para characters

NOTE Confidence: 0.95232968

 $00:43:01.990 \longrightarrow 00:43:05.586$ in these cases and no basal etsypia, so the.

NOTE Confidence: 0.95232968

 $00:43:05.586 \longrightarrow 00:43:08.574$ The first inclination is to dismiss

NOTE Confidence: 0.95232968

 $00:43:08.574 \longrightarrow 00:43:11.548$ these lesions you know but you know

NOTE Confidence: 0.95232968

 $00:43:11.548 \longrightarrow 00:43:13.694$ they studies that have looked at it

NOTE Confidence: 0.95232968

 $00{:}43{:}13.694 \dashrightarrow 00{:}43{:}15.951$ have shown that they do have some

NOTE Confidence: 0.95232968

00:43:15.951 --> 00:43:17.646 driver type mutations within them.

NOTE Confidence: 0.95232968

 $00:43:17.650 \longrightarrow 00:43:21.115$ You can see you know subset of cases have

NOTE Confidence: 0.95232968

00:43:21.115 --> 00:43:25.470 large one Itras mutations and as well.

NOTE Confidence: 0.95232968

 $00:43:25.470 \longrightarrow 00:43:26.990$ And there's a related lesion,

NOTE Confidence: 0.95232968

 $00:43:26.990 \longrightarrow 00:43:29.070$ the so-called differentiated exophytic

NOTE Confidence: 0.95232968

00:43:29.070 --> 00:43:32.290 ***** and trepidal lesion which is defined

NOTE Confidence: 0.95232968

 $00:43:32.290 \longrightarrow 00:43:34.909$ simply very similarly to to to VAD,

00:43:34.910 --> 00:43:38.201 except you know this is more prominently

NOTE Confidence: 0.95232968

 $00:43:38.201 \longrightarrow 00:43:43.910$ a canthotic in the rusi form uniformly

NOTE Confidence: 0.95232968

00:43:43.910 --> 00:43:47.530 that it doesn't have the paleness that

NOTE Confidence: 0.95232968

 $00:43:47.530 \longrightarrow 00:43:50.470$ we spoke of previously and a smaller

NOTE Confidence: 0.95232968

 $00{:}43{:}50.470 \dashrightarrow 00{:}43{:}52.949$ subset associated with lichen sclerosis.

NOTE Confidence: 0.95232968

 $00:43:52.950 \longrightarrow 00:43:55.490$ So that's the so-called devil.

NOTE Confidence: 0.95232968

00:43:55.490 --> 00:43:57.730 And then finally there's the Russiform,

NOTE Confidence: 0.95232968

 $00:43:57.730 \longrightarrow 00:44:00.650$ like in Simplex Chronicus.

NOTE Confidence: 0.95232968

 $00:44:00.650 \longrightarrow 00:44:02.240$ So you know,

NOTE Confidence: 0.95232968

 $00:44:02.240 \longrightarrow 00:44:04.890$ this is a controversial lesion

NOTE Confidence: 0.95232968

 $00:44:04.890 \longrightarrow 00:44:05.950$ in which you know,

NOTE Confidence: 0.95232968

 $00:44:05.950 \longrightarrow 00:44:08.368$ you could argue it one way or the other.

NOTE Confidence: 0.95232968

 $00{:}44{:}08.370 \dashrightarrow 00{:}44{:}11.274$ I took this image directly from

NOTE Confidence: 0.95232968

 $00:44:11.274 \longrightarrow 00:44:13.798$ a paper by Roy and colleagues.

NOTE Confidence: 0.95232968

00:44:13.798 --> 00:44:16.290 I see a Simon Roy that's part

 $00:44:16.366 \longrightarrow 00:44:17.530$ of our audience.

NOTE Confidence: 0.95232968

 $00:44:17.530 \longrightarrow 00:44:21.040$ So maybe it's the same Roy in any event.

NOTE Confidence: 0.95232968

 $00:44:21.040 \longrightarrow 00:44:22.944$ This is a this is this paper is

NOTE Confidence: 0.95232968

 $00:44:22.944 \longrightarrow 00:44:25.040$ there is from Lycos and Chronicles.

NOTE Confidence: 0.95232968

 $00:44:25.040 \longrightarrow 00:44:28.015$ We've all seen some iteration of this

NOTE Confidence: 0.95232968

00:44:28.015 --> 00:44:30.860 lesion is defined by papulometosis,

NOTE Confidence: 0.95232968

 $00:44:30.860 \longrightarrow 00:44:32.675$ prominent hyperglynylosis and

NOTE Confidence: 0.95232968

 $00:44:32.675 \longrightarrow 00:44:34.735$ hyperkinetosis where the subset

NOTE Confidence: 0.95232968

 $00{:}44{:}34.735 \dashrightarrow 00{:}44{:}37.160$ associated with like and sclerosis.

NOTE Confidence: 0.95232968

 $00:44:37.160 \longrightarrow 00:44:39.734$ Over time devil and that started

NOTE Confidence: 0.95232968

 $00:44:39.734 \longrightarrow 00:44:42.017$ getting lumped together because their

NOTE Confidence: 0.95232968

 $00:44:42.017 \longrightarrow 00:44:44.477$ morphological features were so similar

NOTE Confidence: 0.95232968

 $00:44:44.480 \longrightarrow 00:44:47.516$ and they started being considered as

NOTE Confidence: 0.95232968

 $00:44:47.516 \longrightarrow 00:44:49.990$ precancerous lesions because the same.

NOTE Confidence: 0.95232968

00:44:49.990 --> 00:44:52.114 A spectrum of mutations were found

NOTE Confidence: 0.95232968

 $00{:}44{:}52.114 \dashrightarrow 00{:}44{:}55.207$ to be present in both the devil and

 $00:44:55.207 \longrightarrow 00:44:56.815$ costnoma irrespective of whether

NOTE Confidence: 0.95232968

 $00{:}44{:}56.815 \dashrightarrow 00{:}45{:}00.035$ or not the costnoma was diagnosed

NOTE Confidence: 0.95232968

00:45:00.035 --> 00:45:01.790 synchronously or metachronously.

NOTE Confidence: 0.95232968

 $00:45:01.790 \longrightarrow 00:45:05.070$ And also we had a subset of cases

NOTE Confidence: 0.95232968

 $00:45:05.070 \longrightarrow 00:45:07.541$ where diagnosis of of devil of

NOTE Confidence: 0.95232968

00:45:07.541 --> 00:45:10.375 that was made and then it recurred

NOTE Confidence: 0.95232968

 $00:45:10.375 \longrightarrow 00:45:12.067$ as an invasive costnoma.

NOTE Confidence: 0.95232968

 $00:45:12.070 \longrightarrow 00:45:14.092$ And I certainly have a personal

NOTE Confidence: 0.95232968

 $00:45:14.092 \longrightarrow 00:45:17.410$ experience with those as well.

NOTE Confidence: 0.95232968

 $00{:}45{:}17.410 \dashrightarrow 00{:}45{:}20.280$ And and then there's this study from

NOTE Confidence: 0.95232968

00:45:20.280 --> 00:45:25.690 again Roy et all that had 27 cases.

NOTE Confidence: 0.95232968

 $00:45:25.690 \longrightarrow 00:45:27.310$ And so then essentially the

NOTE Confidence: 0.95232968

 $00{:}45{:}27.310 \dashrightarrow 00{:}45{:}29.642$ largest study to date and look at

NOTE Confidence: 0.95232968

 $00:45:29.642 \longrightarrow 00:45:31.362$ the progression rates to squamous

NOTE Confidence: 0.95232968

 $00:45:31.362 \longrightarrow 00:45:32.970$ cell carcinoma in this courts,

 $00:45:32.970 \longrightarrow 00:45:35.570$ it was 46% for that.

NOTE Confidence: 0.95232968

 $00:45:35.570 \longrightarrow 00:45:38.090 40\%$ for Devil and about 20 percent,

NOTE Confidence: 0.95232968

 $00:45:38.090 \longrightarrow 00:45:41.310$ 27% for the Russeform and let's see

NOTE Confidence: 0.95232968

 $00:45:41.310 \longrightarrow 00:45:43.846$ with 37% overall for the whole court.

NOTE Confidence: 0.95232968

 $00:45:43.850 \longrightarrow 00:45:45.206$ So you know they,

NOTE Confidence: 0.95232968

 $00:45:45.206 \longrightarrow 00:45:47.658$ they take the position that all of

NOTE Confidence: 0.95232968

 $00:45:47.658 \longrightarrow 00:45:50.080$ these were part of the same spectrum

NOTE Confidence: 0.95232968

 $00:45:50.080 \longrightarrow 00:45:52.530$ of lesions and ISSVD has taken the

NOTE Confidence: 0.95232968

 $00:45:52.530 \longrightarrow 00:45:54.750$ same position prior they took that

NOTE Confidence: 0.95232968

00:45:54.821 --> 00:45:57.930 position one year before that paper,

NOTE Confidence: 0.95232968

 $00:45:57.930 \longrightarrow 00:46:00.450$ what they call that these lesions,

NOTE Confidence: 0.95232968

 $00:46:00.450 \longrightarrow 00:46:03.168$ whether it's bad Devil or whatnot.

NOTE Confidence: 0.95232968

 $00{:}46{:}03.170 \dashrightarrow 00{:}46{:}05.529$ Should all be under the same umbrella

NOTE Confidence: 0.95232968

 $00:46:05.529 \longrightarrow 00:46:07.306$ called **** aberrant maturation.

NOTE Confidence: 0.95232968

 $00:46:07.306 \longrightarrow 00:46:10.718$ And today you find **** aberrant

NOTE Confidence: 0.95232968

 $00:46:10.718 \longrightarrow 00:46:14.058$ maturation as essentially HPV independent

 $00:46:14.058 \longrightarrow 00:46:17.730$ lesions that combined aberrant maturation,

NOTE Confidence: 0.95232968

 $00{:}46{:}17.730 \to 00{:}46{:}21.815$ that big hyperkeratosis or parakeratosis

NOTE Confidence: 0.95232968

 $00:46:21.815 \longrightarrow 00:46:25.083$ and echanthosis and irregular

NOTE Confidence: 0.9150649375

00:46:25.090 --> 00:46:27.538 Richie with minimal nucleotipia.

NOTE Confidence: 0.9150649375

 $00{:}46{:}27.538 \dashrightarrow 00{:}46{:}32.147$ Also the the lesion needs to be P16

NOTE Confidence: 0.9150649375

 $00:46:32.147 \longrightarrow 00:46:36.058$ negative and in in P53 wild type.

NOTE Confidence: 0.9150649375

00:46:36.060 --> 00:46:39.616 So here's a lesion which doesn't

NOTE Confidence: 0.9150649375

00:46:39.616 --> 00:46:42.196 seem to be remarkable except

NOTE Confidence: 0.9150649375

 $00{:}46{:}42.196 \to 00{:}46{:}44.260$ everything looks uncommonly pink.

NOTE Confidence: 0.9150649375

 $00:46:44.260 \longrightarrow 00:46:45.940$ Thick other keratosis,

NOTE Confidence: 0.9150649375

 $00:46:45.940 \longrightarrow 00:46:47.620$ Galilei is preserved.

NOTE Confidence: 0.9150649375

00:46:47.620 --> 00:46:49.260 This was signed out descriptively

NOTE Confidence: 0.9150649375

 $00:46:49.260 \longrightarrow 00:46:50.900$ a couple of years ago.

NOTE Confidence: 0.9150649375

 $00:46:50.900 \longrightarrow 00:46:55.020$ He came back twice before he was immediately

NOTE Confidence: 0.9150649375

 $00:46:55.020 \longrightarrow 00:46:57.200$ before he was ultimately excised.

00:46:57.200 --> 00:47:00.080 In this excites with negative margins,

NOTE Confidence: 0.9150649375

00:47:00.080 --> 00:47:01.520 but the point is you know

NOTE Confidence: 0.9150649375

 $00:47:01.520 \longrightarrow 00:47:03.040$ when it was being biopsied,

NOTE Confidence: 0.9150649375

 $00:47:03.040 \longrightarrow 00:47:05.240$ the idea was they were taking out most of it.

NOTE Confidence: 0.9150649375

 $00:47:05.240 \longrightarrow 00:47:07.902$ There were tiny lesions to get out but

NOTE Confidence: 0.9150649375

 $00:47:07.902 \longrightarrow 00:47:10.434$ this is what was there microscopically.

NOTE Confidence: 0.9150649375

 $00:47:10.440 \longrightarrow 00:47:12.232$ And so this is an example of the

NOTE Confidence: 0.9150649375

 $00{:}47{:}12.232 \dashrightarrow 00{:}47{:}13.916$ so-called **** after in maturation.

NOTE Confidence: 0.9150649375

00:47:13.916 --> 00:47:16.800 It is more of a russiform morphology

NOTE Confidence: 0.9150649375

00:47:16.800 --> 00:47:20.616 but you know it was a 24 millimeter

NOTE Confidence: 0.9150649375

 $00:47:20.616 \longrightarrow 00:47:24.148$ sessile carpet lesion in the right *****.

NOTE Confidence: 0.9150649375

 $00:47:24.150 \longrightarrow 00:47:25.310$ And so all of it was taken out.

NOTE Confidence: 0.9150649375

 $00:47:25.310 \longrightarrow 00:47:27.294$ So we don't know what would have happened

NOTE Confidence: 0.9150649375

 $00:47:27.294 \longrightarrow 00:47:29.669$ to this lesion if it had not been taken out.

NOTE Confidence: 0.9150649375

 $00:47:29.670 \longrightarrow 00:47:31.763$ And here's a lesion that I'm showing

NOTE Confidence: 0.9150649375

 $00:47:31.763 \longrightarrow 00:47:33.942$ because I know that this lesion

 $00:47:33.942 \longrightarrow 00:47:35.967$ which was signed out descriptively

NOTE Confidence: 0.9150649375

 $00:47:35.967 \longrightarrow 00:47:37.430$ initially several years ago,

NOTE Confidence: 0.9150649375

 $00:47:37.430 \longrightarrow 00:47:39.162$ decades ago,

NOTE Confidence: 0.9150649375

00:47:39.162 --> 00:47:42.748 actually came back as an invasive cancer,

NOTE Confidence: 0.9150649375

 $00:47:42.750 \longrightarrow 00:47:44.070$ whether that's related or not,

NOTE Confidence: 0.9150649375

00:47:44.070 --> 00:47:46.294 it came back as an invasive cancer at

NOTE Confidence: 0.9150649375

 $00:47:46.294 \longrightarrow 00:47:48.507$ the exact site that this was removed.

NOTE Confidence: 0.9150649375

00:47:48.510 --> 00:47:51.030 So you know,

NOTE Confidence: 0.9150649375

00:47:51.030 --> 00:47:54.580 11 can sort of make up that one one wishes.

NOTE Confidence: 0.9150649375

 $00{:}47{:}54.580 \dashrightarrow 00{:}47{:}57.964$ Now there's been a move that says that you

NOTE Confidence: 0.9150649375

00:47:57.964 --> 00:48:01.138 know that van terminology is not ideal,

NOTE Confidence: 0.9150649375

 $00:48:01.140 \longrightarrow 00:48:07.178$ that perhaps a neo name should be used,

NOTE Confidence: 0.9150649375

 $00{:}48{:}07.180 \dashrightarrow 00{:}48{:}09.620$ the so-called the russ oformic anthrotic

NOTE Confidence: 0.9150649375

00:48:09.620 --> 00:48:11.156 ***** Interpitelian neoplasia,

NOTE Confidence: 0.9150649375

 $00:48:11.156 \longrightarrow 00:48:14.730$ but then that this more closely reflects the

 $00:48:14.730 \longrightarrow 00:48:17.060$ pathogenesis and the morphologic features.

NOTE Confidence: 0.9150649375

 $00{:}48{:}17.060 \dashrightarrow 00{:}48{:}20.740$ This was published last year

NOTE Confidence: 0.9150649375

 $00:48:20.740 \longrightarrow 00:48:22.580$ and the features are basically.

NOTE Confidence: 0.9150649375

00:48:22.580 --> 00:48:24.644 Devil Van Mythology.

NOTE Confidence: 0.9150649375

 $00:48:24.644 \longrightarrow 00:48:26.020$ No. Basility.

NOTE Confidence: 0.9150649375 00:48:26.020 --> 00:48:26.346 BIA. NOTE Confidence: 0.9150649375

00:48:26.346 --> 00:48:26.998 You know,

NOTE Confidence: 0.9150649375

00:48:26.998 --> 00:48:28.954 anything that you know can probably

NOTE Confidence: 0.9150649375

 $00{:}48{:}28.954 \dashrightarrow 00{:}48{:}31.116$ meet criteria for the rules from

NOTE Confidence: 0.9150649375

 $00{:}48{:}31.116 \dashrightarrow 00{:}48{:}32.891$ like in Saint Brooks Chronicles.

NOTE Confidence: 0.9150649375

 $00:48:32.900 \longrightarrow 00:48:34.202$ In other words,

NOTE Confidence: 0.9150649375

00:48:34.202 --> 00:48:35.938 no specific popular monstroses

NOTE Confidence: 0.9150649375

 $00:48:35.940 \longrightarrow 00:48:37.900$ and a cantosis and the like.

NOTE Confidence: 0.9150649375

00:48:37.900 --> 00:48:39.121 So you know,

NOTE Confidence: 0.9150649375

 $00:48:39.121 \longrightarrow 00:48:41.970$ whether or not this name takes and

NOTE Confidence: 0.9150649375

 $00:48:42.064 \longrightarrow 00:48:45.096$ we end up using Van versus Van Van,

 $00:48:45.100 \longrightarrow 00:48:47.137$ it's not clear that it's still fresh.

NOTE Confidence: 0.915064937500:48:47.140 --> 00:48:47.476 Again,

NOTE Confidence: 0.9150649375

 $00:48:47.476 \longrightarrow 00:48:49.492$ that's why the point of controversy

NOTE Confidence: 0.9150649375

 $00:48:49.492 \longrightarrow 00:48:50.500$ that's worth discussing.

NOTE Confidence: 0.9150649375

 $00{:}48{:}50.500 \dashrightarrow 00{:}48{:}52.188$ But I think what matters at the end

NOTE Confidence: 0.9150649375

 $00:48:52.188 \longrightarrow 00:48:53.963$ of the day is that to highlight that

NOTE Confidence: 0.9150649375

 $00:48:53.963 \longrightarrow 00:48:56.009$ this is not a typical lesion whose

NOTE Confidence: 0.9150649375

 $00:48:56.009 \longrightarrow 00:48:57.134$ clinical pathologic significance

NOTE Confidence: 0.9150649375

00:48:57.134 --> 00:49:00.018 is not known, not entirely known,

NOTE Confidence: 0.9150649375

00:49:00.018 --> 00:49:01.776 but you know,

NOTE Confidence: 0.9150649375

 $00:49:01.780 \longrightarrow 00:49:04.880$ certainly should be removed or

NOTE Confidence: 0.9150649375

 $00{:}49{:}04.880 \dashrightarrow 00{:}49{:}08.296$ ablated inside one way or the other.

NOTE Confidence: 0.9150649375

 $00{:}49{:}08.300 \dashrightarrow 00{:}49{:}11.798$ But what it's worth, you know,

NOTE Confidence: 0.9150649375

 $00:49:11.798 \longrightarrow 00:49:13.892$ in our serious cases that were

NOTE Confidence: 0.9150649375

 $00:49:13.892 \longrightarrow 00:49:15.278$ called VAM of a bin.

 $00:49:15.280 \longrightarrow 00:49:17.686$ They also in a significant subset

NOTE Confidence: 0.9150649375

 $00{:}49{:}17.686 \dashrightarrow 00{:}49{:}19.840$ showed aberrant stain for Gala 3.

NOTE Confidence: 0.9150649375

 $00:49:19.840 \longrightarrow 00:49:22.330$ They said this reduced or loss

NOTE Confidence: 0.9150649375

00:49:22.330 --> 00:49:24.475 of expression in various subsets

NOTE Confidence: 0.9150649375

 $00:49:24.475 \longrightarrow 00:49:27.275$ suggesting that this is not a way

NOTE Confidence: 0.9150649375

 $00:49:27.275 \longrightarrow 00:49:29.518$ to separate those lesions out.

NOTE Confidence: 0.9150649375

 $00:49:29.520 \longrightarrow 00:49:31.722$ Now clearly high risk HPV is

NOTE Confidence: 0.9150649375

 $00:49:31.722 \longrightarrow 00:49:33.400$ what pursues the diagnosis of

NOTE Confidence: 0.847918297333333

00:49:36.000 --> 00:49:38.065 HCL&D van. There's usually talk

NOTE Confidence: 0.847918297333333

 $00:49:38.065 \longrightarrow 00:49:40.130$ about inflammatory dermatosis is the

NOTE Confidence: 0.847918297333333

 $00{:}49{:}40.194 \dashrightarrow 00{:}49{:}42.199$ background in which this happens.

NOTE Confidence: 0.944425801666666

 $00:49:44.230 \longrightarrow 00:49:46.638$ And and but really the main

NOTE Confidence: 0.944425801666666

 $00:49:46.638 \longrightarrow 00:49:48.067$ inflammatory dermatosis that we're

NOTE Confidence: 0.944425801666666

 $00:49:48.067 \longrightarrow 00:49:49.757$ talking about is lichen sclerosis

NOTE Confidence: 0.944425801666666

 $00:49:49.757 \longrightarrow 00:49:52.218$ because no one that showed a consistent

NOTE Confidence: 0.944425801666666

 $00:49:52.218 \longrightarrow 00:49:54.312$ association between any of the others

 $00:49:54.312 \longrightarrow 00:49:57.190$ and and deviant or cancer in general.

NOTE Confidence: 0.944425801666666

 $00{:}49{:}57.190 \dashrightarrow 00{:}49{:}59.590$ So lichen sclerosis is the big player here.

NOTE Confidence: 0.944425801666666

 $00{:}49{:}59.590 \dashrightarrow 00{:}50{:}02.870$ A smaller subset of the cases of VAM of a

NOTE Confidence: 0.944425801666666

 $00:50:02.950 \longrightarrow 00:50:06.010$ van also have background lichen sclerosis

NOTE Confidence: 0.944425801666666

 $00:50:06.010 \dashrightarrow 00:50:09.640$ about 30% lichen sclerosis is of course.

NOTE Confidence: 0.944425801666666

 $00:50:09.640 \longrightarrow 00:50:12.560$ Stats as an intermediate dermatitis,

NOTE Confidence: 0.944425801666666

 $00:50:12.560 \longrightarrow 00:50:16.868$ kind of a thing that progresses to more

NOTE Confidence: 0.944425801666666

 $00:50:16.868 \longrightarrow 00:50:21.808$ distinctive sclerosis and oxidative stress

NOTE Confidence: 0.944425801666666

 $00:50:21.808 \longrightarrow 00:50:25.840$ and alterations in gene expression profiles,

NOTE Confidence: 0.944425801666666

 $00:50:25.840 \longrightarrow 00:50:29.100$ and ultimately neoplasia in

NOTE Confidence: 0.944425801666666

 $00:50:29.100 \longrightarrow 00:50:31.400$ a small subset of patients.

NOTE Confidence: 0.944425801666666

 $00:50:31.400 \longrightarrow 00:50:36.292$ Now the association between lichen sclerosis,

NOTE Confidence: 0.944425801666666

 $00{:}50{:}36.292 \dashrightarrow 00{:}50{:}37.916$ which was previously called

NOTE Confidence: 0.944425801666666

 $00:50:37.916 \longrightarrow 00:50:39.134$ the complicative bulbitis.

NOTE Confidence: 0.944425801666666

 $00:50:39.140 \longrightarrow 00:50:41.690$ And cancer has been recognized since

 $00:50:41.690 \longrightarrow 00:50:46.740$ at least the mid to late 1800s,

NOTE Confidence: 0.944425801666666

 $00{:}50{:}46.740 \dashrightarrow 00{:}50{:}48.882$ including this favorite court of mind

NOTE Confidence: 0.944425801666666

 $00{:}50{:}48.882 \dashrightarrow 00{:}50{:}51.216$ that that association was thought to be

NOTE Confidence: 0.944425801666666

 $00:50:51.216 \longrightarrow 00:50:53.336$ closer than that of any pathologic lesion,

NOTE Confidence: 0.944425801666666

 $00:50:53.340 \longrightarrow 00:50:56.400$ with the exception of the modern

NOTE Confidence: 0.944425801666666

 $00:50:56.400 \longrightarrow 00:50:57.420$ X-ray dermatitis.

NOTE Confidence: 0.944425801666666

00:50:57.420 --> 00:51:00.108 Now it's not uncommon in resection

NOTE Confidence: 0.944425801666666

00:51:00.108 --> 00:51:02.280 specimens for **** squamous cell

NOTE Confidence: 0.944425801666666

 $00:51:02.280 \longrightarrow 00:51:05.150$ carcinoma to observe D van like and

NOTE Confidence: 0.944425801666666

 $00:51:05.150 \longrightarrow 00:51:07.060$ sclerosis and invasive carcinoma

NOTE Confidence: 0.944425801666666

 $00:51:07.060 \longrightarrow 00:51:08.964$ within the same specimen.

NOTE Confidence: 0.944425801666666

00:51:08.970 --> 00:51:12.466 And in biopsies of DV only you have

NOTE Confidence: 0.944425801666666

 $00:51:12.466 \longrightarrow 00:51:14.885$ concurrent lycan sclerosis in almost

NOTE Confidence: 0.944425801666666

 $00:51:14.885 \longrightarrow 00:51:17.380$ 90% of cases and for squamous cell

NOTE Confidence: 0.944425801666666

 $00:51:17.380 \longrightarrow 00:51:19.609$ cost numerous that are HPV negative.

NOTE Confidence: 0.944425801666666

 $00:51:19.610 \longrightarrow 00:51:21.430$ If you look hard enough you'll find

00:51:21.430 --> 00:51:22.889 like in sclerosis in the background

NOTE Confidence: 0.944425801666666

 $00:51:22.889 \longrightarrow 00:51:25.800$ in up to 88% of cases.

NOTE Confidence: 0.944425801666666

00:51:25.800 --> 00:51:28.432 Basis of Lycos sclerosis in biopsies have

NOTE Confidence: 0.944425801666666

 $00:51:28.432 \longrightarrow 00:51:30.567$ been associated with an increased risk

NOTE Confidence: 0.944425801666666

 $00:51:30.567 \longrightarrow 00:51:35.197$ of ***** cancer with an Sir of over 33.

NOTE Confidence: 0.944425801666666

 $00:51:35.200 \longrightarrow 00:51:39.277$ So you have a 33 fold higher than expected

NOTE Confidence: 0.944425801666666

00:51:39.280 --> 00:51:41.788 frequency of cancers in women with

NOTE Confidence: 0.944425801666666

 $00{:}51{:}41.788 \dashrightarrow 00{:}51{:}44.479$ Lycos sclerosis as compared with controls.

NOTE Confidence: 0.944425801666666

00:51:44.480 --> 00:51:46.475 Another way of looking at it is

NOTE Confidence: 0.944425801666666

00:51:46.475 --> 00:51:48.958 to look at what happens when you

NOTE Confidence: 0.944425801666666

 $00:51:48.958 \longrightarrow 00:51:50.901$ mix Lycos sclerosis with HCL.

NOTE Confidence: 0.944425801666666

 $00:51:50.901 \longrightarrow 00:51:53.187$ So here's the 10 year accumulated

NOTE Confidence: 0.944425801666666

 $00{:}51{:}53.187 \dashrightarrow 00{:}51{:}55.190$ incidence of cancer from H cell,

NOTE Confidence: 0.944425801666666

 $00:51:55.190 \longrightarrow 00:51:57.326$ which as we alluded to before

NOTE Confidence: 0.944425801666666

 $00:51:57.326 \longrightarrow 00:51:58.750$ is only about 10%.

 $00:51:58.750 \longrightarrow 00:52:01.720$ You had lichen sclerosis to regulate

NOTE Confidence: 0.944425801666666

 $00{:}52{:}01.720 \dashrightarrow 00{:}52{:}04.462~\mathrm{HPV}$ associated H cell and all of a

NOTE Confidence: 0.944425801666666

 $00:52:04.462 \longrightarrow 00:52:06.460$ sudden the risk moves on to close

NOTE Confidence: 0.944425801666666

 $00:52:06.460 \longrightarrow 00:52:07.922$ to 40% or 10 years.

NOTE Confidence: 0.944425801666666

 $00:52:07.922 \longrightarrow 00:52:10.098$ And also the rate of movement of

NOTE Confidence: 0.944425801666666

 $00:52:10.098 \longrightarrow 00:52:13.190$ this curve is is, is is much higher.

NOTE Confidence: 0.9402536

 $00{:}52{:}15.290 \dashrightarrow 00{:}52{:}16.998$ And and another way to look at

NOTE Confidence: 0.9402536

 $00:52:16.998 \longrightarrow 00:52:18.640$ it again were on the significance

NOTE Confidence: 0.9402536

 $00{:}52{:}18.640 \longrightarrow 00{:}52{:}20.621$ of the background is to look at

NOTE Confidence: 0.9402536

 $00:52:20.681 \longrightarrow 00:52:22.566$ what happens with the recurrences.

NOTE Confidence: 0.9402536

 $00{:}52{:}22.570 \dashrightarrow 00{:}52{:}25.062$ That's a work by Cigarette Regal I

NOTE Confidence: 0.9402536

00:52:25.062 --> 00:52:27.568 thought it's such a nice elegant study

NOTE Confidence: 0.9402536

00:52:27.570 --> 00:52:30.048 that looked at HPV negative *****

NOTE Confidence: 0.9402536

 $00:52:30.050 \longrightarrow 00:52:33.667$ squad and cell carcinomas and 71%

NOTE Confidence: 0.9402536

00:52:33.667 --> 00:52:37.805 of them were P53 wild type were P 53

NOTE Confidence: 0.9402536

 $00:52:37.805 \longrightarrow 00:52:40.115$ Newton sorry in the invasive cancer

 $00:52:40.115 \longrightarrow 00:52:43.522$ the primary site when they recurred though.

NOTE Confidence: 0.9402536

00:52:43.522 --> 00:52:46.280 Only 88% of them were P53 mutant,

NOTE Confidence: 0.9402536

 $00:52:46.280 \longrightarrow 00:52:48.620$ so you could argue that 12% of cases

NOTE Confidence: 0.9402536

 $00:52:48.620 \longrightarrow 00:52:50.840$ were neo cancers that are rising.

NOTE Confidence: 0.9402536

 $00{:}52{:}50.840 \dashrightarrow 00{:}52{:}52.634$ In this background you can flip

NOTE Confidence: 0.9402536

 $00:52:52.634 \longrightarrow 00:52:54.400$ it the other way as well.

NOTE Confidence: 0.9402536

 $00:52:54.400 \longrightarrow 00:52:57.016$ Those cases were initially P50 very

NOTE Confidence: 0.9402536

00:52:57.016 --> 00:52:59.359 well type significant majority of them,

NOTE Confidence: 0.9402536

 $00:52:59.360 \longrightarrow 00:53:01.640$ 57% of them when they recurred

NOTE Confidence: 0.9402536

 $00:53:01.640 \longrightarrow 00:53:03.160$ had a P53 mutation.

NOTE Confidence: 0.9402536

 $00:53:03.160 \longrightarrow 00:53:04.780$ Again, we could argue some

NOTE Confidence: 0.9402536

 $00:53:04.780 \longrightarrow 00:53:06.076$ progression in the subset,

NOTE Confidence: 0.9402536

 $00{:}53{:}06.080 \dashrightarrow 00{:}53{:}08.348$ but it also argues that a significant

NOTE Confidence: 0.9402536

 $00:53:08.348 \longrightarrow 00:53:10.854$ subset of these cases are neo cancers

NOTE Confidence: 0.9402536

 $00:53:10.854 \longrightarrow 00:53:13.056$ that are happening in this background.

 $00:53:13.060 \longrightarrow 00:53:15.500$ Of inflammatory dermatosis that may

NOTE Confidence: 0.9402536

 $00{:}53{:}15.500 \dashrightarrow 00{:}53{:}17.940$ be permissive for the development

NOTE Confidence: 0.9402536

 $00:53:17.940 \longrightarrow 00:53:20.670$ also bolstering the argument that

NOTE Confidence: 0.9402536

 $00{:}53{:}20.670 \dashrightarrow 00{:}53{:}23.588$ these are independent cancers is that

NOTE Confidence: 0.9402536

 $00:53:23.588 \longrightarrow 00:53:26.136$ when you have the same patient with

NOTE Confidence: 0.9402536

00:53:26.136 --> 00:53:28.500 multiple D vents and you look at the

NOTE Confidence: 0.9402536

00:53:28.500 --> 00:53:31.620 the mutational profiles for P53,

NOTE Confidence: 0.9402536

00:53:31.620 --> 00:53:34.962 they have different P53 mutation within

NOTE Confidence: 0.9402536

 $00{:}53{:}34.962 \dashrightarrow 00{:}53{:}38.339$ different events in the same patient

NOTE Confidence: 0.9402536

 $00:53:38.340 \longrightarrow 00:53:42.400$ in a subset of patients and also when this.

NOTE Confidence: 0.9402536

 $00:53:42.400 \longrightarrow 00:53:45.790$ Invasive squamous cell cause normals recur.

NOTE Confidence: 0.9402536

00:53:45.790 --> 00:53:48.645 A significant subset of those

NOTE Confidence: 0.9402536

 $00:53:48.645 \longrightarrow 00:53:51.206$ recurrences have a set of mutations

NOTE Confidence: 0.9402536

 $00{:}53{:}51.206 \dashrightarrow 00{:}53{:}54.110$ that are not present in the original,

NOTE Confidence: 0.9402536

 $00:53:54.110 \longrightarrow 00:53:56.835$ not just more complicated mutations

NOTE Confidence: 0.9402536

 $00:53:56.835 \longrightarrow 00:53:58.470$ that suggest progression.

 $00:53:58.470 \longrightarrow 00:54:01.284$ They have mutations that are new and

NOTE Confidence: 0.9402536

 $00{:}54{:}01.284 \dashrightarrow 00{:}54{:}04.043$ they don't then that are completely

NOTE Confidence: 0.9402536

 $00:54:04.043 \longrightarrow 00:54:07.370$ absent from the invasive cancer as well.

NOTE Confidence: 0.9402536

 $00:54:07.370 \longrightarrow 00:54:10.866$ So for example you know the primary site.

NOTE Confidence: 0.9402536

00:54:10.866 --> 00:54:13.732 May have a P53 mutation and and

NOTE Confidence: 0.9402536

 $00.54:13.732 \longrightarrow 00.54:15.597$ maybe one or two others.

NOTE Confidence: 0.9402536

 $00:54:15.600 \longrightarrow 00:54:18.015$ The the recurrence would not have a

NOTE Confidence: 0.9402536

 $00:54:18.015 \longrightarrow 00:54:20.385$ P53 mutation and would have a different

NOTE Confidence: 0.9402536

 $00{:}54{:}20.385 \dashrightarrow 00{:}54{:}23.640$ set of other genes that are mutated.

NOTE Confidence: 0.9402536

 $00:54:23.640 \longrightarrow 00:54:26.088$ So Justin again that these are

NOTE Confidence: 0.9402536

00:54:26.088 --> 00:54:28.777 independent cancers in a subset of

NOTE Confidence: 0.9402536

 $00:54:28.777 \longrightarrow 00:54:31.999$ recurrences that occur in this setting.

NOTE Confidence: 0.9402536

 $00:54:32.000 \longrightarrow 00:54:35.200$ And so when we have this H between

NOTE Confidence: 0.9402536

 $00:54:35.200 \longrightarrow 00:54:38.817$ negative cancers 1 hopes and you have two

NOTE Confidence: 0.9402536

 $00:54:38.817 \longrightarrow 00:54:40.960$ different defense associated with it.

 $00:54:40.960 \longrightarrow 00:54:42.920$ When an invasive cancer arises from it,

NOTE Confidence: 0.9402536

00:54:42.920 --> 00:54:47.516 1 hopes that you know this lesion,

NOTE Confidence: 0.9402536

 $00:54:47.516 \longrightarrow 00:54:50.210$ this separate D van is clinically

NOTE Confidence: 0.9402536

 $00:54:50.295 \longrightarrow 00:54:53.396$ evident enough for the surgeon to see.

NOTE Confidence: 0.9402536

 $00:54:53.400 \longrightarrow 00:54:55.160$ It's pathologically evident enough

NOTE Confidence: 0.9402536

 $00:54:55.160 \longrightarrow 00:54:57.360$ for the pathologist to see.

NOTE Confidence: 0.9402536

 $00.54.57.360 \longrightarrow 00.54.58.356$ And if we do see it,

NOTE Confidence: 0.9402536

 $00:54:58.360 \longrightarrow 00:55:00.898$ that is P53 mutation type to

NOTE Confidence: 0.9402536

 $00{:}55{:}00.898 \dashrightarrow 00{:}55{:}03.064$ facilitate the diagnosis because it

NOTE Confidence: 0.9402536

 $00:55:03.064 \longrightarrow 00:55:05.044$ really determines exactly what kind

NOTE Confidence: 0.9402536

 $00:55:05.044 \longrightarrow 00:55:07.878$ of an excision the patient will get.

NOTE Confidence: 0.9402536

 $00:55:07.880 \longrightarrow 00:55:10.876$ And that goes to the issue of.

NOTE Confidence: 0.9402536

 $00:55:10.880 \longrightarrow 00:55:11.548$ The margins,

NOTE Confidence: 0.9402536

00:55:11.548 --> 00:55:13.886 How much of margins should should be

NOTE Confidence: 0.9402536

 $00:55:13.886 \longrightarrow 00:55:16.068$ obtained given all this activity that

NOTE Confidence: 0.9402536

 $00:55:16.068 \longrightarrow 00:55:18.320$ are happening around the invasive cancer,

 $00.55.18.320 \longrightarrow 00.55.19.850$ the D van,

NOTE Confidence: 0.9402536

 $00{:}55{:}19.850 \dashrightarrow 00{:}55{:}23.195$ the almost the events that are happening now.

NOTE Confidence: 0.9402536

 $00{:}55{:}23.195 \dashrightarrow 00{:}55{:}24.380$ The professional organizations

NOTE Confidence: 0.9402536

 $00:55:24.380 \longrightarrow 00:55:26.750$ recommend that in clearance of around

NOTE Confidence: 0.9402536

 $00:55:26.806 \longrightarrow 00:55:28.798$ a minimum of 1010 millimeters be be be

NOTE Confidence: 0.9402536

 $00:55:28.798 \longrightarrow 00:55:30.714$ be done with a histologic clearance

NOTE Confidence: 0.9402536

00:55:30.714 --> 00:55:32.760 for around 8 millimeters to account

NOTE Confidence: 0.9402536

 $00:55:32.760 \longrightarrow 00:55:36.966$ for shrinkage that #8 millimeters.

NOTE Confidence: 0.9402536

 $00:55:36.966 \longrightarrow 00:55:40.578$ Comes from studies that have shown

NOTE Confidence: 0.9402536

 $00:55:40.578 \longrightarrow 00:55:42.084$ in the 1990s,

NOTE Confidence: 0.9402536

 $00{:}55{:}42.090 \dashrightarrow 00{:}55{:}43.690$ just the three-year old studies,

NOTE Confidence: 0.936899133333334

 $00:55:43.690 \longrightarrow 00:55:46.165$ that that number is the is the sweet spot.

NOTE Confidence: 0.936899133333334

 $00{:}55{:}46.170 \dashrightarrow 00{:}55{:}48.000$ Anything that 8 millimeters or

NOTE Confidence: 0.936899133333334

 $00{:}55{:}48.000 \dashrightarrow 00{:}55{:}51.208$ more has to have less frequency of

NOTE Confidence: 0.936899133333334

 $00:55:51.208 \longrightarrow 00:55:53.810$ recurrences in this particular setting.

 $00:55:53.810 \longrightarrow 00:55:55.635$ However, studies published in the

NOTE Confidence: 0.936899133333334

 $00:55:55.635 \longrightarrow 00:55:58.241$ last 10 years have shown that the

NOTE Confidence: 0.936899133333334

00:55:58.241 --> 00:56:00.036 issue is much more complicated.

NOTE Confidence: 0.936899133333334

 $00:56:00.040 \longrightarrow 00:56:03.556$ And indeed, most studies have not

NOTE Confidence: 0.936899133333334

 $00:56:03.556 \longrightarrow 00:56:06.620$ found that 8 millimeter cut off to be

NOTE Confidence: 0.936899133333334

 $00:56:06.620 \longrightarrow 00:56:08.875$ associated with progression free survival.

NOTE Confidence: 0.936899133333334

 $00:56:08.880 \longrightarrow 00:56:11.184$ In fact, some of the others of the

NOTE Confidence: 0.936899133333334

00:56:11.184 --> 00:56:13.728 original study have now essentially

NOTE Confidence: 0.936899133333334

 $00:56:13.728 \longrightarrow 00:56:15.920$ recanted because additional data

NOTE Confidence: 0.936899133333334

 $00:56:15.920 \longrightarrow 00:56:18.560$ have shown that you know it.

NOTE Confidence: 0.936899133333334

 $00:56:18.560 \longrightarrow 00:56:19.800$ It did not influence risk,

NOTE Confidence: 0.936899133333334

 $00:56:19.800 \longrightarrow 00:56:21.335$ that that's more free margin

NOTE Confidence: 0.936899133333334

 $00:56:21.335 \longrightarrow 00:56:23.040$ distance whether you use an 8,

NOTE Confidence: 0.9368991333333334

 $00:56:23.040 \longrightarrow 00:56:25.460$ five or three millimeters.

NOTE Confidence: 0.936899133333334

00:56:25.460 --> 00:56:27.880 What does influence recurrences?

NOTE Confidence: 0.936899133333334

 $00{:}56{:}27.880 \dashrightarrow 00{:}56{:}30.120$ Is finding deviant and lichen

 $00:56:30.120 \longrightarrow 00:56:31.912$ sclerosis at the margin.

NOTE Confidence: 0.936899133333334

 $00{:}56{:}31.920 \dashrightarrow 00{:}56{:}34.958$ Finding deviant by itself at the margin

NOTE Confidence: 0.936899133333334

 $00:56:34.960 \longrightarrow 00:56:37.144$ are the one are the things that affect

NOTE Confidence: 0.936899133333334

 $00:56:37.144 \longrightarrow 00:56:39.039$ recurrences in patient revolving cancer.

NOTE Confidence: 0.936899133333334

 $00:56:39.040 \longrightarrow 00:56:41.580$ Lichen sclerosis by itself

NOTE Confidence: 0.936899133333334

 $00:56:41.580 \longrightarrow 00:56:44.120$ did not affect recurrences,

NOTE Confidence: 0.936899133333334

 $00:56:44.120 \longrightarrow 00:56:47.222$ but recognizing the abnormality around this

NOTE Confidence: 0.936899133333334

 $00:56:47.222 \longrightarrow 00:56:50.439$ invasive cancer continues to be problematic.

NOTE Confidence: 0.936899133333334

 $00:56:50.440 \longrightarrow 00:56:52.057$ So we look at this little ditzel

NOTE Confidence: 0.936899133333334

 $00:56:52.057 \longrightarrow 00:56:53.640$ of an excision that we received,

NOTE Confidence: 0.9368991333333334

 $00{:}56{:}53.640 \dashrightarrow 00{:}56{:}54.663$ which is typical.

NOTE Confidence: 0.936899133333334

 $00:56:54.663 \longrightarrow 00:56:56.368$ And there's abnormal area adjacent

NOTE Confidence: 0.936899133333334

 $00{:}56{:}56.368 {\:\dashrightarrow\:} 00{:}56{:}58.648$ to it that we can all recognize.

NOTE Confidence: 0.936899133333334

00:56:58.650 --> 00:57:00.150 And then there's what looks like

NOTE Confidence: 0.936899133333334

 $00:57:00.150 \longrightarrow 00:57:01.330$ normal skin adjacent to it.

 $00:57:01.330 \longrightarrow 00:57:02.728$ It looked normal to the surgeon.

NOTE Confidence: 0.936899133333334

 $00:57:02.730 \longrightarrow 00:57:04.487$ They thought they were getting the margin.

NOTE Confidence: 0.9368991333333334

00:57:04.490 --> 00:57:06.968 It looked normal to the gross prosector,

NOTE Confidence: 0.936899133333334

 $00:57:06.970 \longrightarrow 00:57:08.690$ but microscopically it was not.

NOTE Confidence: 0.936899133333334

 $00:57:08.690 \longrightarrow 00:57:11.860$ It was full of differentiated Vin and

NOTE Confidence: 0.936899133333334

 $00:57:11.860 \dashrightarrow 00:57:14.820$ indeed when having a saying the P53 on

NOTE Confidence: 0.936899133333334

 $00:57:14.820 \longrightarrow 00:57:19.530$ all blocks of all margins around their

NOTE Confidence: 0.936899133333334

00:57:19.530 --> 00:57:21.948 P53 null LOVA squamous cell cancer.

NOTE Confidence: 0.936899133333334

 $00:57:21.950 \longrightarrow 00:57:24.267$ Four out of 13 cases became positive

NOTE Confidence: 0.936899133333334

00:57:24.267 --> 00:57:26.628 margins and those that were more

NOTE Confidence: 0.936899133333334

00:57:26.628 --> 00:57:28.368 focally positive before became

NOTE Confidence: 0.936899133333334

 $00:57:28.368 \longrightarrow 00:57:30.229$ more extensively possible for DVN.

NOTE Confidence: 0.936899133333334

 $00:57:30.230 \longrightarrow 00:57:32.518$ And the DVN that were in this newly

NOTE Confidence: 0.9368991333333334

 $00:57:32.518 \longrightarrow 00:57:34.470$ identified margins tended to be very subtle.

NOTE Confidence: 0.936899133333334

 $00:57:34.470 \longrightarrow 00:57:35.995$ And this was recently confirmed

NOTE Confidence: 0.936899133333334

 $00:57:35.995 \longrightarrow 00:57:37.906$ earlier this year by the Vancouver

00:57:37.906 --> 00:57:39.868 group showing that when they did

NOTE Confidence: 0.936899133333334

00:57:39.870 --> 00:57:42.467 P53I EC just on the closest margin

NOTE Confidence: 0.936899133333334

 $00:57:42.470 \longrightarrow 00:57:46.027$ that 29% additional cases of DVN

NOTE Confidence: 0.936899133333334

00:57:46.027 --> 00:57:47.929 or at least P53 abnormal insight

NOTE Confidence: 0.936899133333334

 $00:57:47.929 \longrightarrow 00:57:51.270$ to lesions were identified and.

NOTE Confidence: 0.936899133333334

00:57:51.270 --> 00:57:53.004 These lesions were so subtle the

NOTE Confidence: 0.936899133333334

00:57:53.004 --> 00:57:55.381 more you move away from the invasive

NOTE Confidence: 0.936899133333334

 $00:57:55.381 \longrightarrow 00:57:57.697$ cancer that they thought they were

NOTE Confidence: 0.936899133333334

 $00{:}57{:}57.697 \dashrightarrow 00{:}57{:}59.645$ morphologically occult could not be

NOTE Confidence: 0.936899133333334

 $00{:}57{:}59.645 \to 00{:}58{:}01.149$ identified by morphology unknown.

NOTE Confidence: 0.936899133333334

 $00:58:01.150 \longrightarrow 00:58:03.574$ And it's not like P53 signature

NOTE Confidence: 0.936899133333334

 $00:58:03.574 \longrightarrow 00:58:07.014$ where it's like whatever this one is

NOTE Confidence: 0.936899133333334

 $00{:}58{:}07.014 \dashrightarrow 00{:}58{:}10.054$ actually associated with a threefold

NOTE Confidence: 0.936899133333334

 $00:58:10.054 \longrightarrow 00:58:13.079$ increased risk of recurrence finding

NOTE Confidence: 0.936899133333334

00:58:13.079 --> 00:58:15.324 AP53 abnormality at the margin

 $00:58:15.324 \longrightarrow 00:58:17.780$ even though there's no morphologic

NOTE Confidence: 0.936899133333334

 $00{:}58{:}17.780 \dashrightarrow 00{:}58{:}20.665$ correlate for that P53 abnormality.

NOTE Confidence: 0.936899133333334

 $00:58:20.670 \longrightarrow 00:58:24.189$ And that goes to the what has happened when,

NOTE Confidence: 0.936899133333334 00:58:24.190 --> 00:58:24.826 what has, NOTE Confidence: 0.936899133333334

00:58:24.826 --> 00:58:26.416 what has happened with respect

NOTE Confidence: 0.936899133333334

 $00:58:26.416 \longrightarrow 00:58:28.110$ to how patients are treated.

NOTE Confidence: 0.936899133333334

00:58:28.110 --> 00:58:29.990 So prior to 1995,

NOTE Confidence: 0.936899133333334

00:58:29.990 --> 00:58:31.870 surgeries were more draconian,

NOTE Confidence: 0.936899133333334

 $00:58:31.870 \longrightarrow 00:58:34.366$ you know lot of radical valvectomies

NOTE Confidence: 0.936899133333334

 $00:58:34.366 \longrightarrow 00:58:36.750$ for small lesions and the like.

NOTE Confidence: 0.936899133333334

 $00:58:36.750 \longrightarrow 00:58:39.200$ And so there was no difference between

NOTE Confidence: 0.936899133333334

00:58:39.200 --> 00:58:41.149 HPV positive and HPV negative.

NOTE Confidence: 0.936899133333334

 $00:58:41.150 \longrightarrow 00:58:43.496$ But those differences emerged after we

NOTE Confidence: 0.9368991333333334

 $00:58:43.496 \longrightarrow 00:58:45.730$ moved to more conservative surgeries.

NOTE Confidence: 0.936899133333334

 $00:58:45.730 \longrightarrow 00:58:47.648$ So what tended to happen prior to

NOTE Confidence: 0.936899133333334

 $00:58:47.650 \longrightarrow 00:58:49.174$ 1995 was that they were taking

 $00:58:49.174 \longrightarrow 00:58:50.782$ out the invasive cancer as well

NOTE Confidence: 0.936899133333334

 $00:58:50.782 \longrightarrow 00:58:52.127$ as everything in the background.

NOTE Confidence: 0.936899133333334

00:58:52.130 --> 00:58:53.450 And that's again that's speculative,

NOTE Confidence: 0.936899133333334

00:58:53.450 --> 00:58:55.376 but that's probably what was happening

NOTE Confidence: 0.936899133333334

 $00:58:55.376 \longrightarrow 00:58:57.680$ that they were taking out the invasive

NOTE Confidence: 0.936899133333334

 $00:58:57.680 \longrightarrow 00:58:59.606$ cancer and everything else around it.

NOTE Confidence: 0.918779692631579

 $00:58:59.610 \longrightarrow 00:59:01.866$ So it it behaved more like an in

NOTE Confidence: 0.918779692631579

 $00:59:01.866 \longrightarrow 00:59:03.558$ positive case where you're taking

NOTE Confidence: 0.918779692631579

 $00{:}59{:}03.558 \dashrightarrow 00{:}59{:}05.682$ the discrete lesion in the duct,

NOTE Confidence: 0.918779692631579

 $00:59:05.690 \longrightarrow 00:59:07.010$ but that has changed.

NOTE Confidence: 0.918779692631579

 $00:59:07.010 \longrightarrow 00:59:09.476$ So what really matters now is identifying

NOTE Confidence: 0.918779692631579

 $00:59:09.476 \longrightarrow 00:59:12.416$ whether or not those cases but even

NOTE Confidence: 0.918779692631579

 $00{:}59{:}12.416 \dashrightarrow 00{:}59{:}14.299$ surgical excision is appropriate.

NOTE Confidence: 0.918779692631579

 $00:59:14.300 \longrightarrow 00:59:17.020$ For all those lesions adjacent,

NOTE Confidence: 0.918779692631579

 $00:59:17.020 \longrightarrow 00:59:20.076$ whether or not once you think about more

 $00:59:20.076 \longrightarrow 00:59:21.954$ aggressive ablation insight to insight

NOTE Confidence: 0.918779692631579

 $00:59:21.954 \longrightarrow 00:59:24.852$ to for for those lesions after the

NOTE Confidence: 0.918779692631579

 $00:59:24.852 \longrightarrow 00:59:27.538$ main invasive cancer has been removed.

NOTE Confidence: 0.918779692631579

 $00:59:27.540 \longrightarrow 00:59:31.804$ I'll end by by showing this to explain

NOTE Confidence: 0.918779692631579

 $00:59:31.804 \longrightarrow 00:59:34.268$ the title of my of this presentation

NOTE Confidence: 0.918779692631579

 $00:59:34.268 \longrightarrow 00:59:37.252$ we just talked about a stay a tale of

NOTE Confidence: 0.918779692631579

 $00:59:37.252 \longrightarrow 00:59:39.590$ stasis and this is the survival rate.

NOTE Confidence: 0.918779692631579

 $00.59:39.590 \longrightarrow 00.59:42.110$ Is the upper curve talks about,

NOTE Confidence: 0.918779692631579

00:59:42.110 --> 00:59:44.510 you know, new Volvo cancer cases

NOTE Confidence: 0.918779692631579

00:59:44.510 --> 00:59:46.760 that have been diagnosed based on

NOTE Confidence: 0.918779692631579

00:59:46.760 --> 00:59:49.950 Co data going back to 1975 and look

NOTE Confidence: 0.918779692631579

 $00:59:49.950 \longrightarrow 00:59:52.386$ at the flat death rate associated

NOTE Confidence: 0.918779692631579

 $00:59:52.386 \longrightarrow 00:59:54.430$ with it over the last 50 years.

NOTE Confidence: 0.918779692631579

 $00:59:54.430 \longrightarrow 00:59:56.590$ Despite all of those progress,

NOTE Confidence: 0.918779692631579

 $00:59:56.590 \longrightarrow 00:59:59.122$ all the advances prognosis

NOTE Confidence: 0.918779692631579

00:59:59.122 --> 01:00:01.246 remains roughly just bad.

 $01:00:01.246 \longrightarrow 01:00:02.958$ There's been no significant

NOTE Confidence: 0.918779692631579

01:00:02.958 --> 01:00:04.551 improvement overall in, in,

NOTE Confidence: 0.918779692631579

 $01:00:04.551 \longrightarrow 01:00:07.260$ in in the survival rates for Volvo

NOTE Confidence: 0.918779692631579

 $01:00:07.338 \longrightarrow 01:00:09.966$ cancer over the last half century.

NOTE Confidence: 0.918779692631579

 $01:00:09.970 \longrightarrow 01:00:11.930$ But there is also a tale of progress.

NOTE Confidence: 0.918779692631579

 $01:00:11.930 \longrightarrow 01:00:14.660$ RFS has improved to some

NOTE Confidence: 0.918779692631579

 $01:00:14.660 \longrightarrow 01:00:16.155$ extent and so recurrences,

NOTE Confidence: 0.918779692631579

 $01:00:16.155 \longrightarrow 01:00:18.550$ which is really the main thing

NOTE Confidence: 0.918779692631579

 $01:00:18.550 \longrightarrow 01:00:21.684$ to some extent has improved.

NOTE Confidence: 0.918779692631579

 $01:00:21.684 \longrightarrow 01:00:23.369$ But there are clearly a

NOTE Confidence: 0.918779692631579

 $01:00:23.369 \longrightarrow 01:00:25.209$ lot of work to be done.

NOTE Confidence: 0.918779692631579

 $01:00:25.210 \longrightarrow 01:00:27.022$ And the question is for pathology

NOTE Confidence: 0.918779692631579

 $01:00:27.022 \dashrightarrow 01:00:29.281$ really it's about what is the true

NOTE Confidence: 0.918779692631579

01:00:29.281 --> 01:00:30.605 morphologic spectrum for Devin,

NOTE Confidence: 0.918779692631579

 $01\text{:}00\text{:}30.610 \dashrightarrow 01\text{:}00\text{:}32.974$ as well as this HBV negative

 $01:00:32.974 \longrightarrow 01:00:35.250$ P53 raw type precursor regions,

NOTE Confidence: 0.918779692631579

 $01:00:35.250 \longrightarrow 01:00:37.914$ the biomarkers for Devin.

NOTE Confidence: 0.918779692631579

 $01:00:37.914 \longrightarrow 01:00:39.246$ Urgently needed.

NOTE Confidence: 0.918779692631579

 $01:00:39.250 \longrightarrow 01:00:41.610$ And then what to do with the three

NOTE Confidence: 0.918779692631579

 $01:00:41.610 \longrightarrow 01:00:43.204$ mutations and the margins and

NOTE Confidence: 0.918779692631579

01:00:43.204 --> 01:00:45.088 exactly how do we handle that?

NOTE Confidence: 0.918779692631579

 $01:00:45.090 \longrightarrow 01:00:48.290$ And of course identifying the

NOTE Confidence: 0.918779692631579

 $01:00:48.290 \longrightarrow 01:00:51.040$ aggressive subset using the mythology

NOTE Confidence: 0.918779692631579

 $01{:}00{:}51.040 \dashrightarrow 01{:}00{:}53.490$ essentially is so much great.

NOTE Confidence: 0.918779692631579

01:00:53.490 --> 01:00:56.164 So thanks again for the privilege and

NOTE Confidence: 0.918779692631579

 $01{:}00{:}56.170 \dashrightarrow 01{:}00{:}57.730$ I will be happy to make any questions.

NOTE Confidence: 0.905982325

01:00:59.810 --> 01:01:01.110 Thank you Doctor Fedori

NOTE Confidence: 0.905982325

 $01:01:01.110 \longrightarrow 01:01:02.410$ for a wonderful lecture,

NOTE Confidence: 0.905982325

01:01:02.410 --> 01:01:04.866 particularly focusing on the

NOTE Confidence: 0.905982325

 $01:01:04.866 \longrightarrow 01:01:06.708$ challenging HPV independent.

NOTE Confidence: 0.905982325

 $01:01:06.710 \longrightarrow 01:01:08.290$ Volvo in Preptelian lesions,

 $01:01:08.290 \longrightarrow 01:01:10.265$ in the interest of time,

NOTE Confidence: 0.905982325

01:01:10.270 --> 01:01:14.156 I'll hand it open it up for please

NOTE Confidence: 0.905982325

 $01:01:14.156 \longrightarrow 01:01:16.986$ unmute yourself and ask questions.

NOTE Confidence: 0.928932275

01:01:18.910 --> 01:01:20.910 Hi. Hi, this is, this is Pale Lou.

NOTE Confidence: 0.928932275

 $01:01:20.910 \longrightarrow 01:01:24.430$ You can hear me. Yes, I can, I think.

NOTE Confidence: 0.928932275

01:01:24.430 --> 01:01:26.885 Thank you for bringing this

NOTE Confidence: 0.928932275

01:01:26.885 --> 01:01:29.004 timely update in this ground.

NOTE Confidence: 0.928932275

 $01:01:29.004 \longrightarrow 01:01:32.310$ But the vova cancer in the precursor lesions.

NOTE Confidence: 0.928932275

01:01:32.310 --> 01:01:34.742 There's lots of details,

NOTE Confidence: 0.928932275

 $01:01:34.742 \longrightarrow 01:01:37.014$ interesting discoveries in recent decades,

NOTE Confidence: 0.928932275

 $01:01:37.014 \longrightarrow 01:01:39.510$ so I do have a question.

NOTE Confidence: 0.928932275

 $01:01:39.510 \longrightarrow 01:01:41.070$ We'll see. What do you think?

NOTE Confidence: 0.928932275

01:01:41.070 --> 01:01:44.458 Do you think the diving as a

NOTE Confidence: 0.928932275

 $01:01:44.458 \longrightarrow 01:01:47.263$ whole is a single kernel event

NOTE Confidence: 0.928932275

 $01:01:47.263 \longrightarrow 01:01:49.067$ of any dealing associated?

 $01:01:49.070 \longrightarrow 01:01:50.042$ Squints are customized.

NOTE Confidence: 0.928932275

 $01:01:50.042 \longrightarrow 01:01:51.986$ This could be a field effect,

NOTE Confidence: 0.94025354

01:01:55.430 --> 01:01:58.027 I think. Because of Divin of course,

NOTE Confidence: 0.94025354

 $01:01:58.030 \longrightarrow 01:02:00.286$ like I said, it's the subset of them

NOTE Confidence: 0.94025354

 $01:02:00.286 \longrightarrow 01:02:02.380$ are diagnosed by themselves and are

NOTE Confidence: 0.94025354

01:02:02.380 --> 01:02:04.215 never actually diagnosed with squamous

NOTE Confidence: 0.94025354

 $01{:}02{:}04.215 \dashrightarrow 01{:}02{:}06.790$ cell carcinoma that clearly and in

NOTE Confidence: 0.94025354

 $01:02:06.790 \longrightarrow 01:02:10.035$ those cases do have you know the

NOTE Confidence: 0.94025354

01:02:10.035 --> 01:02:13.327 expected mutation of profile of PCC3,

NOTE Confidence: 0.94025354

 $01:02:13.327 \longrightarrow 01:02:18.263$ PIC, 3C, A HRAS and the like that

NOTE Confidence: 0.94025354

 $01{:}02{:}18.270 \dashrightarrow 01{:}02{:}20.545$ number one it can occur by itself.

NOTE Confidence: 0.94025354

 $01:02:20.550 \longrightarrow 01:02:22.308$ We have enough data for that

NOTE Confidence: 0.94025354

 $01:02:22.310 \longrightarrow 01:02:25.290$ when we see Divin.

NOTE Confidence: 0.94025354

 $01:02:25.290 \longrightarrow 01:02:27.309$ Associated with invasive

NOTE Confidence: 0.94025354

01:02:27.309 --> 01:02:29.328 squamous cell carcinoma,

NOTE Confidence: 0.94025354

 $01:02:29.330 \longrightarrow 01:02:33.370$ most of those deviant lesions have

01:02:33.370 --> 01:02:36.170 a similar mutation or profile,

NOTE Confidence: 0.94025354

 $01:02:36.170 \longrightarrow 01:02:38.330$ at least based on the limited NGS panels

NOTE Confidence: 0.94025354

 $01:02:38.330 \longrightarrow 01:02:40.817$ that have been used as the squamous

NOTE Confidence: 0.94025354

 $01:02:40.817 \longrightarrow 01:02:44.100$ cell carcinoma that are adjacent to them.

NOTE Confidence: 0.94025354

 $01:02:44.100 \longrightarrow 01:02:46.820$ So I think what's probably

NOTE Confidence: 0.94025354

 $01{:}02{:}46.820 \dashrightarrow 01{:}02{:}49.540$ happening is that multiple factors,

NOTE Confidence: 0.94025354

 $01:02:49.540 \longrightarrow 01:02:51.630$ some of them are independent

NOTE Confidence: 0.94025354

 $01:02:51.630 \longrightarrow 01:02:53.720$ new lesions that are entirely

NOTE Confidence: 0.94025354

 $01:02:53.798 \longrightarrow 01:02:56.178$ unrelated to the invasive cancer,

NOTE Confidence: 0.94025354

 $01{:}02{:}56.180 \dashrightarrow 01{:}02{:}58.852$ but I think a subset are indeed field

NOTE Confidence: 0.94025354

 $01{:}02{:}58.852 \dashrightarrow 01{:}03{:}01.811$ effect that are happening that are sort of

NOTE Confidence: 0.94025354

 $01{:}03{:}01.811 \dashrightarrow 01{:}03{:}04.378$ related to the invasive cancer as well.

NOTE Confidence: 0.94025354

 $01:03:04.380 \longrightarrow 01:03:05.211$ So with that,

NOTE Confidence: 0.94025354

 $01:03:05.211 \longrightarrow 01:03:07.820$ so have you seen or read the articles,

NOTE Confidence: 0.94025354

 $01:03:07.820 \longrightarrow 01:03:09.720$ investigations where you show?

01:03:09.720 --> 01:03:11.620 Different patches of divings,

NOTE Confidence: 0.94025354

 $01:03:11.620 \longrightarrow 01:03:13.700$ they have different P53 mutations.

NOTE Confidence: 0.94025354

 $01:03:13.700 \longrightarrow 01:03:17.956$ Or have you seen a diving or

NOTE Confidence: 0.94025354

 $01:03:17.956 \longrightarrow 01:03:21.253$ revovactum of diving where you see

NOTE Confidence: 0.94025354

01:03:21.253 --> 01:03:23.217 different P53 staining patterns?

NOTE Confidence: 0.94025354

 $01{:}03{:}23.220 \dashrightarrow 01{:}03{:}25.770$ Like you you have focally diffuse

NOTE Confidence: 0.94025354

 $01{:}03{:}25.770 \dashrightarrow 01{:}03{:}28.426$ positive and the other focus will

NOTE Confidence: 0.94025354

 $01:03:28.426 \longrightarrow 01:03:31.054$ be now or the others possibly

NOTE Confidence: 0.94025354

01:03:31.054 --> 01:03:32.140 cytoplasmic P53 alteration?

NOTE Confidence: 0.94025354

 $01:03:32.140 \longrightarrow 01:03:33.100$ I don't know.

NOTE Confidence: 0.94025354

01:03:33.100 --> 01:03:34.535 Have you read it or have you

NOTE Confidence: 0.94025354

 $01:03:34.535 \longrightarrow 01:03:35.460$ seen such a case?

NOTE Confidence: 0.94025354

 $01:03:35.460 \longrightarrow 01:03:36.620$ I don't think there is.

NOTE Confidence: 0.94025354

 $01:03:36.620 \longrightarrow 01:03:38.040 \text{ I don't think that has}$

NOTE Confidence: 0.94025354

01:03:38.040 --> 01:03:40.314 been reported I I I I must.

NOTE Confidence: 0.94025354

 $01:03:40.314 \longrightarrow 01:03:42.582$ I'm familiar with just by everything

 $01{:}03{:}42.582 --> 01{:}03{:}44.539$ that's written in the space.

NOTE Confidence: 0.94025354

 $01:03:44.540 \longrightarrow 01:03:47.015$ The the first question that

NOTE Confidence: 0.94025354

01:03:47.015 --> 01:03:50.319 you know the same devins with

NOTE Confidence: 0.94025354

01:03:50.319 --> 01:03:52.884 different patterns has been shown.

NOTE Confidence: 0.94025354

 $01:03:52.884 \longrightarrow 01:03:55.952$ You know if you read the small

NOTE Confidence: 0.94025354

 $01:03:55.952 \longrightarrow 01:03:59.340$ case series by Pinto had one was

NOTE Confidence: 0.94025354

 $01:03:59.340 \longrightarrow 01:04:02.700$ nonsense the other one was missense,

NOTE Confidence: 0.94025354

 $01:04:02.700 \longrightarrow 01:04:04.500$ different devins in the same patient.

NOTE Confidence: 0.9578644975

 $01:04:06.900 \longrightarrow 01:04:08.100$ Mutations and so they had

NOTE Confidence: 0.9578644975

 $01:04:08.100 \longrightarrow 01:04:08.820$ different staining patterns.

NOTE Confidence: 0.9578644975

 $01:04:08.820 \longrightarrow 01:04:10.577$ One was null and the other one

NOTE Confidence: 0.9578644975

 $01:04:10.577 \longrightarrow 01:04:12.650$ was null for expression and so,

NOTE Confidence: 0.9578644975

 $01:04:12.650 \longrightarrow 01:04:14.660$ so we know that that happens.

NOTE Confidence: 0.9578644975

 $01:04:14.660 \longrightarrow 01:04:18.931$ I for one have not seen a case where

NOTE Confidence: 0.9578644975

 $01:04:18.931 \longrightarrow 01:04:21.517$ you know in a resection specimen

 $01:04:21.517 \longrightarrow 01:04:23.663$ there are multiple devins associated

NOTE Confidence: 0.9578644975

01:04:23.663 --> 01:04:25.601 with an invasive cancer and they

NOTE Confidence: 0.9578644975

 $01:04:25.601 \longrightarrow 01:04:27.060$ have different staining patterns.

NOTE Confidence: 0.9578644975

 $01:04:27.060 \longrightarrow 01:04:28.698$ The devins have different staining patterns

NOTE Confidence: 0.946657506363636

 $01:04:31.060 \longrightarrow 01:04:32.705$ and I don't think, I don't think

NOTE Confidence: 0.946657506363636

 $01{:}04{:}32.705 \dashrightarrow 01{:}04{:}33.900$ it's been documented elsewhere.

NOTE Confidence: 0.94830432

01:04:46.240 --> 01:04:48.320 On a slightly different note,

NOTE Confidence: 0.94830432

 $01:04:48.320 \longrightarrow 01:04:49.960$ what are your thoughts and this

NOTE Confidence: 0.94830432

 $01:04:49.960 \longrightarrow 01:04:51.820$ new method of depth of invasion

NOTE Confidence: 0.94830432

01:04:51.886 --> 01:04:53.438 on HPV independent cancers?

NOTE Confidence: 0.882016433333333

 $01:04:56.400 \longrightarrow 01:04:59.040$ Well, I guess time would tell.

NOTE Confidence: 0.882016433333333

 $01:04:59.040 \longrightarrow 01:05:01.240$ I think time would tell whether or not

NOTE Confidence: 0.9402536

 $01:05:03.840 \longrightarrow 01:05:06.038$ I always like new things like that,

NOTE Confidence: 0.9402536

 $01:05:06.040 \longrightarrow 01:05:08.624$ especially if it improves.

NOTE Confidence: 0.9402536

 $01:05:08.624 \longrightarrow 01:05:10.562$ Prognostication or stratification

NOTE Confidence: 0.9402536

01:05:10.562 --> 01:05:14.436 of patients. I think once it's

01:05:14.436 --> 01:05:15.976 introduced then we'll analyze it,

NOTE Confidence: 0.9402536

 $01:05:15.980 \longrightarrow 01:05:19.572$ we'll do a lot of you know review

NOTE Confidence: 0.9402536

 $01:05:19.572 \longrightarrow 01:05:22.388$ of it and see whether or not it

NOTE Confidence: 0.9402536

 $01:05:22.388 \longrightarrow 01:05:23.580$ actually performs as indicated.

NOTE Confidence: 0.9402536

 $01:05:23.580 \longrightarrow 01:05:25.260$ I think it's easy to do.

NOTE Confidence: 0.9402536

 $01:05:25.260 \longrightarrow 01:05:28.081$ We currently doing the study right now

NOTE Confidence: 0.9402536

01:05:28.081 --> 01:05:31.201 on that same subject we'll we'll we'll

NOTE Confidence: 0.9402536

 $01:05:31.201 \longrightarrow 01:05:33.820$ see what what it shows ultimately.

NOTE Confidence: 0.9402536

01:05:33.820 --> 01:05:35.140 So I I without judgment until

NOTE Confidence: 0.9402536

 $01:05:35.140 \longrightarrow 01:05:36.020$ we see that either.

NOTE Confidence: 0.9402536

 $01{:}05{:}39.080 \dashrightarrow 01{:}05{:}42.640$ So thank you again for a wonderful talk.

NOTE Confidence: 0.9402536

01:05:42.640 --> 01:05:44.320 It's a shame you couldn't be in person,

NOTE Confidence: 0.9402536

 $01{:}05{:}44.320 \dashrightarrow 01{:}05{:}46.840$ but we understand. So hopefully.

NOTE Confidence: 0.94830432

01:05:48.560 --> 01:05:50.240 Well, thanks again. It's again,

NOTE Confidence: 0.94830432

 $01:05:50.240 \longrightarrow 01:05:52.262$ it's an absolute pleasure and it's

 $01:05:52.262 \longrightarrow 01:05:56.000$ good to to see faces of friends,

NOTE Confidence: 0.94830432

 $01:05:56.000 \longrightarrow 01:05:57.915$ colleagues and mentors.

NOTE Confidence: 0.94830432

 $01:05:57.915 \longrightarrow 01:06:01.245$ And so thanks again for the

NOTE Confidence: 0.94830432

 $01{:}06{:}01.245 \dashrightarrow 01{:}06{:}03.170$ invitation and you'll have a

NOTE Confidence: 0.94830432

 $01{:}06{:}03.170 \dashrightarrow 01{:}06{:}04.960$ great rest of your day. Thank you.