

WEBVTT

NOTE duration:"00:58:58"

NOTE recognizability:0.625

NOTE language:en-us

NOTE Confidence: 0.743575608571429

00:00:00.000 --> 00:00:05.159 It's about time. So let's start it.

NOTE Confidence: 0.743575608571429

00:00:05.160 --> 00:00:08.536 It's my great honor and the privilege to

NOTE Confidence: 0.743575608571429

00:00:08.536 --> 00:00:10.920 introduce today's ground run speakers.

NOTE Confidence: 0.743575608571429

00:00:10.920 --> 00:00:14.080 And Doctor Ling Chen.

NOTE Confidence: 0.743575608571429

00:00:14.080 --> 00:00:18.420 He's currently a Professor and Vice Chair

NOTE Confidence: 0.743575608571429

00:00:18.420 --> 00:00:20.784 for Translational Research Director,

NOTE Confidence: 0.743575608571429

00:00:20.784 --> 00:00:22.296 or Anatomic Passage,

NOTE Confidence: 0.743575608571429

00:00:22.296 --> 00:00:25.320 Director of Molecular Passage in the

NOTE Confidence: 0.743575608571429

00:00:25.399 --> 00:00:27.927 Department Passage and Laboratory

NOTE Confidence: 0.743575608571429

00:00:27.927 --> 00:00:30.500 Medicine at the Brown University

NOTE Confidence: 0.743575608571429

00:00:30.500 --> 00:00:32.400 Warren Alpert Medical School.

NOTE Confidence: 0.787500415

00:00:34.560 --> 00:00:39.208 So Doctor Chang also is associate

NOTE Confidence: 0.787500415

00:00:39.208 --> 00:00:41.800 director for the shared resources at

NOTE Confidence: 0.787500415

00:00:41.877 --> 00:00:44.397 the Brown University Cancer Center.
NOTE Confidence: 0.739240026666667

00:00:48.560 --> 00:00:53.198 He got his medical education from
NOTE Confidence: 0.739240026666667

00:00:53.200 --> 00:00:55.616 Beijing Uni Medical University.
NOTE Confidence: 0.739240026666667

00:00:55.616 --> 00:00:59.240 Now it's part of baking universities,
NOTE Confidence: 0.739240026666667

00:00:59.240 --> 00:01:03.624 and he received passage to residency
NOTE Confidence: 0.739240026666667

00:01:03.624 --> 00:01:06.784 training at KC Western Reserve
NOTE Confidence: 0.739240026666667

00:01:06.784 --> 00:01:08.680 University University Hospital,
NOTE Confidence: 0.739240026666667

00:01:08.680 --> 00:01:10.450 Cleveland Medical Center.
NOTE Confidence: 0.739240026666667

00:01:10.450 --> 00:01:14.580 So he did his fellow passage fellowship
NOTE Confidence: 0.739240026666667

00:01:14.671 --> 00:01:18.115 training at the Mayo Clinic Rochester,
NOTE Confidence: 0.739240026666667

00:01:18.120 --> 00:01:23.192 MN, before he joined the Bron.
NOTE Confidence: 0.739240026666667

00:01:23.192 --> 00:01:25.616 Almost lived there almost two
NOTE Confidence: 0.739240026666667

00:01:25.616 --> 00:01:29.786 year now and he was long been in
NOTE Confidence: 0.739240026666667

00:01:29.786 --> 00:01:32.496 Indiana University he's they are
NOTE Confidence: 0.739240026666667

00:01:32.496 --> 00:01:35.594 he's endowed professor and the
NOTE Confidence: 0.739240026666667

00:01:35.594 --> 00:01:38.154 director of molecular passage.

NOTE Confidence: 0.822436377

00:01:40.200 --> 00:01:43.248 So over the course his professional

NOTE Confidence: 0.822436377

00:01:43.248 --> 00:01:45.893 career he published numerous papers.

NOTE Confidence: 0.822436377

00:01:45.893 --> 00:01:49.442 So he's CVI even not try to read

NOTE Confidence: 0.822436377

00:01:49.442 --> 00:01:51.840 through his CVI only read his

NOTE Confidence: 0.822436377

00:01:51.840 --> 00:01:54.872 summary or his CV which is a packed

NOTE Confidence: 0.822436377

00:01:54.958 --> 00:01:57.800 with words and it's 3 pages long.

NOTE Confidence: 0.822436377

00:01:57.800 --> 00:02:03.600 So he published over 1200,

NOTE Confidence: 0.822436377

00:02:03.600 --> 00:02:06.600 you know, peer reviewed articles

NOTE Confidence: 0.822436377

00:02:06.600 --> 00:02:09.240 which I counted probably you know,

NOTE Confidence: 0.822436377

00:02:09.240 --> 00:02:12.516 think about 20 years career and almost

NOTE Confidence: 0.822436377

00:02:12.516 --> 00:02:15.960 every month he had to write 4 papers.

NOTE Confidence: 0.822436377

00:02:15.960 --> 00:02:18.400 So I don't know how he can do this.

NOTE Confidence: 0.822436377

00:02:18.400 --> 00:02:21.800 So all this publication generated

NOTE Confidence: 0.822436377

00:02:21.800 --> 00:02:26.080 about 63,000 citations.

NOTE Confidence: 0.822436377

00:02:26.080 --> 00:02:28.279 His age index is

NOTE Confidence: 0.95172924

00:02:29.360 --> 00:02:34.292 125. So he also is very
NOTE Confidence: 0.95172924

00:02:34.292 --> 00:02:36.000 productive published numerous
NOTE Confidence: 0.881150546

00:02:36.000 --> 00:02:38.800 textbook and the numerous book
NOTE Confidence: 0.881150546

00:02:38.800 --> 00:02:44.390 chapters and some of his textbook
NOTE Confidence: 0.881150546

00:02:44.390 --> 00:02:47.200 including Molecular Surgical Passage,
NOTE Confidence: 0.881150546

00:02:47.200 --> 00:02:49.400 Urological Surgical Passage and
NOTE Confidence: 0.881150546

00:02:49.400 --> 00:02:52.760 The Essential of Anatomic Passage.
NOTE Confidence: 0.881150546

00:02:52.760 --> 00:02:55.580 This is the one of his textbook.
NOTE Confidence: 0.881150546

00:02:55.580 --> 00:02:58.480 You know I you know during my training
NOTE Confidence: 0.881150546

00:02:58.480 --> 00:03:01.680 and my practice I still I read a lot
NOTE Confidence: 0.881150546

00:03:01.680 --> 00:03:05.239 of his book so he going to donate this
NOTE Confidence: 0.881150546

00:03:05.240 --> 00:03:09.051 book to our passage residents so after
NOTE Confidence: 0.881150546

00:03:09.051 --> 00:03:13.608 meeting you take it the book so he
NOTE Confidence: 0.881150546

00:03:13.608 --> 00:03:16.040 also is a contributor authors for The
NOTE Confidence: 0.7503945925

00:03:18.880 --> 00:03:20.840 Who 2004 2016 and
NOTE Confidence: 0.74364912125

00:03:23.200 --> 00:03:26.932 2022 blue Book which is WHO

NOTE Confidence: 0.74364912125

00:03:26.932 --> 00:03:30.157 classification of tumor urinary and

NOTE Confidence: 0.74364912125

00:03:30.157 --> 00:03:33.317 genital and Male genital tumors.

NOTE Confidence: 0.74364912125

00:03:33.320 --> 00:03:37.433 So in the most recent edition WHO Blue Book,

NOTE Confidence: 0.74364912125

00:03:37.440 --> 00:03:40.200 he contributed 21 chapters.

NOTE Confidence: 0.80778662625

00:03:43.560 --> 00:03:46.360 So he's a research focus on the translational

NOTE Confidence: 0.80778662625

00:03:46.360 --> 00:03:50.252 study of genital urinary cancers,

NOTE Confidence: 0.80778662625

00:03:50.252 --> 00:03:53.628 especially bladder cancers and

NOTE Confidence: 0.80778662625

00:03:53.628 --> 00:03:56.703 molecular diagnostics of solid tumors.

NOTE Confidence: 0.80778662625

00:03:56.703 --> 00:04:01.064 So he has been principal and Co

NOTE Confidence: 0.80778662625

00:04:01.064 --> 00:04:03.760 investigator for many grants.

NOTE Confidence: 0.80778662625

00:04:03.760 --> 00:04:06.120 I counted over 40 grants

NOTE Confidence: 0.80778662625

00:04:06.120 --> 00:04:10.680 and he also served on many.

NOTE Confidence: 0.80778662625

00:04:10.680 --> 00:04:14.204 Review board is A50 review

NOTE Confidence: 0.80778662625

00:04:14.204 --> 00:04:17.944 board for the Federal Funding

NOTE Confidence: 0.80778662625

00:04:17.944 --> 00:04:21.999 Agency including NIHNCI and DoD.

NOTE Confidence: 0.80778662625

00:04:22.000 --> 00:04:27.145 And he's served as a panelist for
NOTE Confidence: 0.80778662625

00:04:27.145 --> 00:04:31.265 the NCI Sport program since 2000.
NOTE Confidence: 0.80778662625

00:04:31.265 --> 00:04:33.190 Every years he was sitting
NOTE Confidence: 0.80778662625

00:04:33.190 --> 00:04:35.319 in the as a panelist.
NOTE Confidence: 0.80778662625

00:04:35.320 --> 00:04:39.680 I don't know that after I reveal his CV.
NOTE Confidence: 0.80778662625

00:04:39.680 --> 00:04:41.651 So, I mean,
NOTE Confidence: 0.80778662625

00:04:41.651 --> 00:04:44.279 he's a renowned geopathologist
NOTE Confidence: 0.80778662625

00:04:44.280 --> 00:04:48.053 and was ranked number one among
NOTE Confidence: 0.80778662625

00:04:48.053 --> 00:04:51.228 the world expert in Euro genital
NOTE Confidence: 0.80778662625

00:04:51.228 --> 00:04:54.552 neopath and top three expert in
NOTE Confidence: 0.80778662625

00:04:54.552 --> 00:04:57.719 the field of bladder cancers.
NOTE Confidence: 0.80778662625

00:04:57.720 --> 00:05:02.320 And he's the president-elect of
NOTE Confidence: 0.80778662625

00:05:02.320 --> 00:05:05.559 International Society of Zoological
NOTE Confidence: 0.4845134325

00:05:05.560 --> 00:05:09.360 Passage, so I said.
NOTE Confidence: 0.4845134325

00:05:09.360 --> 00:05:14.253 So he received numerous prestigious
NOTE Confidence: 0.4845134325

00:05:14.253 --> 00:05:18.040 award including the Stilwell

NOTE Confidence: 0.7929646775

00:05:18.280 --> 00:05:21.244 Orbison Award from the United States

NOTE Confidence: 0.7929646775

00:05:21.244 --> 00:05:24.200 and the Canadian Academy of Passage,

NOTE Confidence: 0.7929646775

00:05:24.200 --> 00:05:28.533 the Cross Medical Medal award from the

NOTE Confidence: 0.7929646775

00:05:28.533 --> 00:05:32.360 International Society of Urological Passage.

NOTE Confidence: 0.7929646775

00:05:32.360 --> 00:05:36.580 So ASAP and the thing also Pudi

NOTE Confidence: 0.7929646775

00:05:36.580 --> 00:05:39.280 Stewart Price from the Osprey

NOTE Confidence: 0.7929646775

00:05:39.385 --> 00:05:42.237 Society of Surgical Passage.

NOTE Confidence: 0.7929646775

00:05:42.240 --> 00:05:46.948 So so it's without further ado I think he

NOTE Confidence: 0.7929646775

00:05:46.948 --> 00:05:50.761 I can go on you know to to to read all his

NOTE Confidence: 0.7929646775

00:05:50.761 --> 00:05:54.236 CVI think you know today his presentation.

NOTE Confidence: 0.7929646775

00:05:54.240 --> 00:05:58.244 So I I will not do more presentation.

NOTE Confidence: 0.7929646775

00:05:58.244 --> 00:06:02.280 I will leave the floor to Doctor Dan.

NOTE Confidence: 0.7929646775

00:06:02.280 --> 00:06:03.198 So, Doctor Chen,

NOTE Confidence: 0.85958891

00:06:04.640 --> 00:06:05.240 thank you so much.

NOTE Confidence: 0.420416146666667

00:06:08.160 --> 00:06:10.672 Thank you Doctor, for being in chat.

NOTE Confidence: 0.420416146666667

00:06:10.672 --> 00:06:13.395 I was really great privilege and honoured
NOTE Confidence: 0.420416146666667

00:06:13.395 --> 00:06:16.800 to be here and to see many friends.
NOTE Confidence: 0.420416146666667

00:06:16.800 --> 00:06:19.680 Peter he's also one of my mentor and
NOTE Confidence: 0.420416146666667

00:06:19.680 --> 00:06:23.816 and Johnson Ma you know Doctor Liu and
NOTE Confidence: 0.420416146666667

00:06:23.816 --> 00:06:27.520 yeah so very happy to hear and this
NOTE Confidence: 0.420416146666667

00:06:27.520 --> 00:06:31.008 this this morning and I get a chance to
NOTE Confidence: 0.420416146666667

00:06:31.008 --> 00:06:32.736 show some interesting cases and we're
NOTE Confidence: 0.420416146666667

00:06:32.736 --> 00:06:35.000 going to talk about it in a little bit.
NOTE Confidence: 0.420416146666667

00:06:35.000 --> 00:06:37.149 You know there's a the resin the
NOTE Confidence: 0.420416146666667

00:06:37.149 --> 00:06:39.098 fellow it's just amazing of course
NOTE Confidence: 0.420416146666667

00:06:39.098 --> 00:06:41.338 you know you don't treat them the
NOTE Confidence: 0.420416146666667

00:06:41.401 --> 00:06:44.156 best so so this really yeah and talk
NOTE Confidence: 0.420416146666667

00:06:44.156 --> 00:06:46.778 talking about that and I think you
NOTE Confidence: 0.420416146666667

00:06:46.778 --> 00:06:49.778 know they also you know I'm also very
NOTE Confidence: 0.420416146666667

00:06:49.778 --> 00:06:55.120 lucky that I was able to work one
NOTE Confidence: 0.420416146666667

00:06:55.120 --> 00:06:58.710 really two of the best geopolitics

NOTE Confidence: 0.420416146666667

00:06:58.710 --> 00:07:01.440 jump in the field in the West.

NOTE Confidence: 0.420416146666667

00:07:01.440 --> 00:07:03.870 After finishing my fellowship training

NOTE Confidence: 0.420416146666667

00:07:03.870 --> 00:07:06.712 at the mayor clinic I will update

NOTE Confidence: 0.420416146666667

00:07:06.712 --> 00:07:09.940 Oswick and John Indiana work with

NOTE Confidence: 0.420416146666667

00:07:09.940 --> 00:07:14.240 John Abelay until I moved to Brown.

NOTE Confidence: 0.420416146666667

00:07:14.240 --> 00:07:16.364 And so I'm really very fortunate

NOTE Confidence: 0.420416146666667

00:07:16.364 --> 00:07:19.240 I get a chance and to work with

NOTE Confidence: 0.420416146666667

00:07:19.240 --> 00:07:23.400 them and learn from them And so.

NOTE Confidence: 0.420416146666667

00:07:23.400 --> 00:07:26.216 So today I'm going to be you know

NOTE Confidence: 0.420416146666667

00:07:26.216 --> 00:07:30.176 you know so in my lab talk you know

NOTE Confidence: 0.420416146666667

00:07:30.176 --> 00:07:33.014 very next next half hour also try

NOTE Confidence: 0.420416146666667

00:07:33.014 --> 00:07:35.920 to kind of try to you know bridging

NOTE Confidence: 0.420416146666667

00:07:35.920 --> 00:07:38.720 some gaps and kind of explain you

NOTE Confidence: 0.420416146666667

00:07:38.720 --> 00:07:41.450 know that you know some new entity

NOTE Confidence: 0.420416146666667

00:07:41.450 --> 00:07:44.189 or some old entity know where we

NOTE Confidence: 0.420416146666667

00:07:44.189 --> 00:07:46.960 standing and it's in the last decade.

NOTE Confidence: 0.420416146666667

00:07:46.960 --> 00:07:49.510 You know it's really we truly

NOTE Confidence: 0.420416146666667

00:07:49.510 --> 00:07:51.656 see remarkable progress in the,

NOTE Confidence: 0.420416146666667

00:07:51.656 --> 00:07:52.520 in the,

NOTE Confidence: 0.420416146666667

00:07:52.520 --> 00:07:53.234 in the,

NOTE Confidence: 0.420416146666667

00:07:53.234 --> 00:07:56.090 in our field not just Gu here but

NOTE Confidence: 0.420416146666667

00:07:56.185 --> 00:07:57.632 I think Gu is very,

NOTE Confidence: 0.420416146666667

00:07:57.632 --> 00:07:59.816 very good example if you look at

NOTE Confidence: 0.420416146666667

00:07:59.816 --> 00:08:01.760 the timelines you know the the 1st,

NOTE Confidence: 0.420416146666667

00:08:01.760 --> 00:08:04.016 the 3rd edition of the publisher

NOTE Confidence: 0.420416146666667

00:08:04.016 --> 00:08:06.520 was published in 2002 and it's

NOTE Confidence: 0.420416146666667

00:08:06.520 --> 00:08:10.920 long lag for it's almost 14 years

NOTE Confidence: 0.420416146666667

00:08:10.920 --> 00:08:13.596 you know but people hunt for it

NOTE Confidence: 0.420416146666667

00:08:13.596 --> 00:08:16.671 is one of the chief editor of the

NOTE Confidence: 0.420416146666667

00:08:16.671 --> 00:08:19.373 2016 edition and and now it's only

NOTE Confidence: 0.420416146666667

00:08:19.373 --> 00:08:21.640 takes 6-6 years for new edition.

NOTE Confidence: 0.420416146666667
00:08:21.640 --> 00:08:24.655 I was told that the next edition will be
NOTE Confidence: 0.420416146666667
00:08:24.655 --> 00:08:27.782 come out in three years or maybe 2025.
NOTE Confidence: 0.420416146666667
00:08:27.782 --> 00:08:31.292 So that's how things expanded
NOTE Confidence: 0.420416146666667
00:08:31.292 --> 00:08:35.200 and so this truly amazing.
NOTE Confidence: 0.420416146666667
00:08:35.200 --> 00:08:37.600 But for Bladder,
NOTE Confidence: 0.420416146666667
00:08:37.600 --> 00:08:40.600 I guess it's the framework
NOTE Confidence: 0.420416146666667
00:08:40.600 --> 00:08:41.680 that has been laid out,
NOTE Confidence: 0.420416146666667
00:08:41.680 --> 00:08:45.185 you know from previous edition Peter
NOTE Confidence: 0.420416146666667
00:08:45.185 --> 00:08:48.720 Humphrey and it's remain the same intact,
NOTE Confidence: 0.420416146666667
00:08:48.720 --> 00:08:52.083 it's largely very,
NOTE Confidence: 0.420416146666667
00:08:52.083 --> 00:08:53.129 very small.
NOTE Confidence: 0.420416146666667
00:08:53.129 --> 00:08:55.744 You know funality changes we're
NOTE Confidence: 0.420416146666667
00:08:55.744 --> 00:08:58.930 going to go into go into that.
NOTE Confidence: 0.420416146666667
00:08:58.930 --> 00:09:03.719 And in the in the W-2 202 classifications
NOTE Confidence: 0.420416146666667
00:09:03.720 --> 00:09:05.245 you'll probably notice that it's
NOTE Confidence: 0.420416146666667

00:09:05.245 --> 00:09:07.483 kind of one of a few exceptions
NOTE Confidence: 0.420416146666667

00:09:07.483 --> 00:09:09.758 that we always have to list two.
NOTE Confidence: 0.420416146666667

00:09:09.760 --> 00:09:12.119 I don't know why there's only two
NOTE Confidence: 0.420416146666667

00:09:12.119 --> 00:09:14.297 Banana tumour was listed so many
NOTE Confidence: 0.420416146666667

00:09:14.297 --> 00:09:16.499 banana other tumours you know there's
NOTE Confidence: 0.420416146666667

00:09:16.499 --> 00:09:19.152 only two has been listed and under
NOTE Confidence: 0.420416146666667

00:09:19.152 --> 00:09:21.633 banana category Lamb there's a pang
NOTE Confidence: 0.420416146666667

00:09:21.633 --> 00:09:23.693 lamp which is somewhat controversial
NOTE Confidence: 0.420416146666667

00:09:23.693 --> 00:09:25.989 entity I will not talk about in
NOTE Confidence: 0.420416146666667

00:09:25.989 --> 00:09:28.360 this lecture and in a molecular
NOTE Confidence: 0.420416146666667

00:09:28.360 --> 00:09:30.120 tumour and invasive customer.
NOTE Confidence: 0.420416146666667

00:09:30.120 --> 00:09:32.136 So this is a framework you know
NOTE Confidence: 0.420416146666667

00:09:32.136 --> 00:09:34.317 so it's just you can pretty much
NOTE Confidence: 0.420416146666667

00:09:34.320 --> 00:09:36.738 fit in and all the leachings
NOTE Confidence: 0.420416146666667

00:09:36.738 --> 00:09:38.350 you know both malignant
NOTE Confidence: 0.52850706

00:09:38.427 --> 00:09:40.519 leaching in those category.

NOTE Confidence: 0.52850706

00:09:40.520 --> 00:09:43.016 So that's beauty about that's so

NOTE Confidence: 0.52850706

00:09:43.016 --> 00:09:46.110 how about so what's pump you Lucilia

NOTE Confidence: 0.52850706

00:09:46.110 --> 00:09:48.978 Papilloma and this study was was done

NOTE Confidence: 0.52850706

00:09:48.978 --> 00:09:51.450 was well as a fellow and I think

NOTE Confidence: 0.52850706

00:09:51.525 --> 00:09:54.424 this truly you know kind of set up

NOTE Confidence: 0.52850706

00:09:54.424 --> 00:09:57.300 a theme that in the in the analysis

NOTE Confidence: 0.52850706

00:09:57.300 --> 00:09:59.696 we've done back in the 20 years

NOTE Confidence: 0.52850706

00:09:59.696 --> 00:10:02.552 22 years ago we analyzed you know

NOTE Confidence: 0.52850706

00:10:02.560 --> 00:10:05.728 52 cases of the eucilia papilloma

NOTE Confidence: 0.52850706

00:10:05.728 --> 00:10:10.160 using the strict W2 criteria people

NOTE Confidence: 0.52850706

00:10:10.160 --> 00:10:13.240 at the Mayo Clinic in the lodges

NOTE Confidence: 0.52850706

00:10:13.240 --> 00:10:16.772 they it's the unique advantage to

NOTE Confidence: 0.52850706

00:10:16.772 --> 00:10:19.370 study there is the population here

NOTE Confidence: 0.52850706

00:10:19.450 --> 00:10:21.774 the 1st in our stable they don't

NOTE Confidence: 0.52850706

00:10:21.774 --> 00:10:24.275 move so more than 58 years follow

NOTE Confidence: 0.52850706

00:10:24.275 --> 00:10:27.015 up we found this issue that really
NOTE Confidence: 0.52850706

00:10:27.015 --> 00:10:29.906 you know occur and also they never
NOTE Confidence: 0.52850706

00:10:29.906 --> 00:10:31.916 develop you know see a customer so.
NOTE Confidence: 0.52850706

00:10:31.920 --> 00:10:34.521 So by default you know and boys I think
NOTE Confidence: 0.52850706

00:10:34.521 --> 00:10:36.719 there's several other studies came out
NOTE Confidence: 0.52850706

00:10:36.720 --> 00:10:39.160 later years and that's it's been an issue.
NOTE Confidence: 0.52850706

00:10:39.160 --> 00:10:42.478 And so what's the molecular magnitude,
NOTE Confidence: 0.52850706

00:10:42.480 --> 00:10:43.780 what's new about this,
NOTE Confidence: 0.52850706

00:10:43.780 --> 00:10:45.080 you know what's the,
NOTE Confidence: 0.52850706

00:10:45.080 --> 00:10:45.784 what's the,
NOTE Confidence: 0.52850706

00:10:45.784 --> 00:10:48.600 what's the driver you know for this tumor.
NOTE Confidence: 0.52850706

00:10:48.600 --> 00:10:51.264 And I was I think you know there's a
NOTE Confidence: 0.52850706

00:10:51.264 --> 00:10:53.328 study with publishing a couple years
NOTE Confidence: 0.52850706

00:10:53.328 --> 00:10:55.839 ago in the European your knowledge and
NOTE Confidence: 0.52850706

00:10:55.839 --> 00:10:57.849 we found that interestingly we're going
NOTE Confidence: 0.52850706

00:10:57.849 --> 00:11:00.437 to talk about this tut new tissue again.

NOTE Confidence: 0.52850706

00:11:00.440 --> 00:11:02.416 You know this is very you know

NOTE Confidence: 0.52850706

00:11:02.416 --> 00:11:03.756 kind of a a very,

NOTE Confidence: 0.52850706

00:11:03.760 --> 00:11:06.910 very hard prevalence of a tut promoter

NOTE Confidence: 0.52850706

00:11:06.910 --> 00:11:09.862 mutation in the UCLA Papilloma and

NOTE Confidence: 0.52850706

00:11:09.862 --> 00:11:11.914 also it's fair common you know

NOTE Confidence: 0.52850706

00:11:11.914 --> 00:11:14.596 that you know this is 1/3 promoter

NOTE Confidence: 0.52850706

00:11:14.596 --> 00:11:17.286 mutation is probably the major

NOTE Confidence: 0.52850706

00:11:17.286 --> 00:11:19.812 you know breakthrough findings in

NOTE Confidence: 0.52850706

00:11:19.812 --> 00:11:21.904 terms of our understanding.

NOTE Confidence: 0.52850706

00:11:21.904 --> 00:11:24.736 You know funding molecular drafters

NOTE Confidence: 0.52850706

00:11:24.736 --> 00:11:27.076 like molecules only was recently

NOTE Confidence: 0.52850706

00:11:27.076 --> 00:11:29.464 described in the 2013 ten almost

NOTE Confidence: 0.52850706

00:11:29.464 --> 00:11:31.760 10 years ago 1st paper pubs in

NOTE Confidence: 0.52850706

00:11:31.835 --> 00:11:34.155 the science that talking about

NOTE Confidence: 0.52850706

00:11:34.155 --> 00:11:36.475 funding could promoting the tissue

NOTE Confidence: 0.52850706

00:11:36.547 --> 00:11:38.757 in Melanoma and bladder cancer.
NOTE Confidence: 0.52850706

00:11:38.760 --> 00:11:41.460 Since that explosion of knowledge
NOTE Confidence: 0.52850706

00:11:41.460 --> 00:11:44.653 and the publications and this is
NOTE Confidence: 0.52850706

00:11:44.653 --> 00:11:47.077 a few papers we just published
NOTE Confidence: 0.52850706

00:11:47.080 --> 00:11:49.915 this a couple months ago in human
NOTE Confidence: 0.52850706

00:11:49.915 --> 00:11:53.045 massage and we summarize you know
NOTE Confidence: 0.52850706

00:11:53.045 --> 00:11:55.932 the findings that that's done.
NOTE Confidence: 0.52850706

00:11:55.932 --> 00:12:00.252 You know in the cumulatively there's this
NOTE Confidence: 0.52850706

00:12:00.252 --> 00:12:03.876 over 7000 patients blood cancer patient,
NOTE Confidence: 0.52850706

00:12:03.880 --> 00:12:06.736 blood tumor patient has been analyzed
NOTE Confidence: 0.52850706

00:12:06.736 --> 00:12:09.948 for 3rd mutation as 2023 and 3rd
NOTE Confidence: 0.52850706

00:12:09.948 --> 00:12:13.000 mutation you know will lead to teramus
NOTE Confidence: 0.52850706

00:12:13.086 --> 00:12:16.696 reactivation will eventually OK good
NOTE Confidence: 0.52850706

00:12:16.696 --> 00:12:19.570 leading to the genetic instability
NOTE Confidence: 0.52850706

00:12:19.570 --> 00:12:22.720 stem cellness and stem cellness and
NOTE Confidence: 0.52850706

00:12:22.720 --> 00:12:24.856 proliferation and tumor progression

NOTE Confidence: 0.52850706

00:12:24.856 --> 00:12:27.190 And and it's interesting you know

NOTE Confidence: 0.52850706

00:12:27.190 --> 00:12:29.691 that you know we found you know

NOTE Confidence: 0.52850706

00:12:29.691 --> 00:12:32.059 this is just say you know in this

NOTE Confidence: 0.52850706

00:12:32.133 --> 00:12:34.318 systemic meta analysis you know

NOTE Confidence: 0.52850706

00:12:34.320 --> 00:12:37.752 could promote mutation is kind of

NOTE Confidence: 0.52850706

00:12:37.752 --> 00:12:41.011 across board it's most common it's

NOTE Confidence: 0.52850706

00:12:41.011 --> 00:12:44.210 up to 80% of Uricilia tumor will

NOTE Confidence: 0.52850706

00:12:44.210 --> 00:12:46.074 have third promote mutation.

NOTE Confidence: 0.52850706

00:12:46.080 --> 00:12:48.730 It's regardless low grade highway

NOTE Confidence: 0.52850706

00:12:48.730 --> 00:12:51.560 or tumor stage it's a fair stable.

NOTE Confidence: 0.52850706

00:12:51.560 --> 00:12:56.160 So this is really great bar Mark

NOTE Confidence: 0.52850706

00:12:56.160 --> 00:12:59.163 go back you know to another banana

NOTE Confidence: 0.52850706

00:12:59.163 --> 00:13:01.725 lesion it's called inverted uricilia

NOTE Confidence: 0.52850706

00:13:01.725 --> 00:13:04.500 type and input ulucilia papadoma.

NOTE Confidence: 0.52850706

00:13:04.500 --> 00:13:07.560 The lesion is first almost identical

NOTE Confidence: 0.52850706

00:13:07.560 --> 00:13:10.640 to what we've seen in the head
NOTE Confidence: 0.52850706

00:13:10.640 --> 00:13:12.500 neck organ and the tumors,
NOTE Confidence: 0.52850706

00:13:12.500 --> 00:13:14.275 you know that they're characterized
NOTE Confidence: 0.52850706

00:13:14.275 --> 00:13:16.548 you know by you know they have
NOTE Confidence: 0.52850706

00:13:16.548 --> 00:13:17.784 a polypod architecture and
NOTE Confidence: 0.541699994333333

00:13:17.842 --> 00:13:19.237 a cuff by normal ulucilium
NOTE Confidence: 0.541699994333333

00:13:19.237 --> 00:13:21.578 with the and the most in cause.
NOTE Confidence: 0.541699994333333

00:13:21.578 --> 00:13:24.861 And again this is complete benign lesion
NOTE Confidence: 0.541699994333333

00:13:24.861 --> 00:13:27.767 if you strictly follow W criteria
NOTE Confidence: 0.541699994333333

00:13:27.767 --> 00:13:30.999 that not say it's been on tumor.
NOTE Confidence: 0.541699994333333

00:13:31.000 --> 00:13:34.930 And so why we talk about invert
NOTE Confidence: 0.541699994333333

00:13:34.930 --> 00:13:37.034 Papilloma here because this is going
NOTE Confidence: 0.541699994333333

00:13:37.034 --> 00:13:39.498 to be leading to one of the key
NOTE Confidence: 0.541699994333333

00:13:39.498 --> 00:13:41.386 degradation diagnosis it's called
NOTE Confidence: 0.541699994333333

00:13:41.386 --> 00:13:43.751 Eurocilia carcinoma of will invert
NOTE Confidence: 0.541699994333333

00:13:43.751 --> 00:13:46.383 growth or invert Eurocilia customer

NOTE Confidence: 0.541699994333333

00:13:46.383 --> 00:13:49.264 less terminology we're not we're not

NOTE Confidence: 0.541699994333333

00:13:49.264 --> 00:13:51.760 using so it's but again so it's kind

NOTE Confidence: 0.541699994333333

00:13:51.833 --> 00:13:54.145 of important you know from surgical.

NOTE Confidence: 0.541699994333333

00:13:54.145 --> 00:13:58.887 Yeah yeah OK OK so from a yeah good day.

NOTE Confidence: 0.541699994333333

00:13:58.887 --> 00:14:01.050 So from surgical passage point of view

NOTE Confidence: 0.541699994333333

00:14:01.117 --> 00:14:03.151 it's important that you know distinguish

NOTE Confidence: 0.541699994333333

00:14:03.151 --> 00:14:05.821 you know that's a let me let me ask

NOTE Confidence: 0.541699994333333

00:14:05.821 --> 00:14:07.700 the audience you know not not Peter.

NOTE Confidence: 0.541699994333333

00:14:07.700 --> 00:14:10.114 So who can who can tell which

NOTE Confidence: 0.541699994333333

00:14:10.114 --> 00:14:11.518 one which one should be which

NOTE Confidence: 0.541699994333333

00:14:11.518 --> 00:14:13.039 one should be the bladder out.

NOTE Confidence: 0.541699994333333

00:14:13.040 --> 00:14:14.960 Which one the bladder should stay.

NOTE Confidence: 0.541699994333333

00:14:14.960 --> 00:14:18.880 Which one's been on which one malignant

NOTE Confidence: 0.541699994333333

00:14:18.880 --> 00:14:23.540 We have a any senior resident Gu fellow.

NOTE Confidence: 0.541699994333333

00:14:23.540 --> 00:14:26.260 OK let what's your fault you

NOTE Confidence: 0.541699994333333

00:14:26.260 --> 00:14:27.360 know which one's benign.
NOTE Confidence: 0.541699994333333

00:14:27.360 --> 00:14:28.320 Which one's malignant
NOTE Confidence: 0.5854663

00:14:31.080 --> 00:14:37.758 It's the A, A's, A's A's benign malignant
NOTE Confidence: 0.5854663

00:14:37.760 --> 00:14:44.400 B is benign. B for benign good.
NOTE Confidence: 0.856647315

00:14:48.600 --> 00:14:55.054 OK. So I cannot tell and I'm, I'm,
NOTE Confidence: 0.856647315

00:14:55.054 --> 00:14:57.190 I'm, I'm, I'm sure you know that this
NOTE Confidence: 0.856647315

00:14:57.255 --> 00:14:59.404 is kind of saying even nowadays with
NOTE Confidence: 0.856647315

00:14:59.404 --> 00:15:01.488 all the knowledge in the bladder tumor
NOTE Confidence: 0.856647315

00:15:01.488 --> 00:15:05.016 is still challenging and difficult.
NOTE Confidence: 0.856647315

00:15:05.016 --> 00:15:08.560 And in this case, the,
NOTE Confidence: 0.856647315

00:15:08.560 --> 00:15:10.622 the inferred papilloma, you know,
NOTE Confidence: 0.856647315

00:15:10.622 --> 00:15:11.877 first thing for your customer,
NOTE Confidence: 0.856647315

00:15:11.880 --> 00:15:13.872 I think, I think you know even for
NOTE Confidence: 0.856647315

00:15:13.872 --> 00:15:15.696 expert maybe have some hesitation.
NOTE Confidence: 0.856647315

00:15:15.696 --> 00:15:18.864 And so what's the key molecular
NOTE Confidence: 0.856647315

00:15:18.864 --> 00:15:21.336 features that you know if you,

NOTE Confidence: 0.856647315

00:15:21.336 --> 00:15:23.558 I want 100% rely on morphology.

NOTE Confidence: 0.856647315

00:15:23.558 --> 00:15:25.874 So what's the key molecular features

NOTE Confidence: 0.856647315

00:15:25.874 --> 00:15:28.317 LAD can tell them in my experience,

NOTE Confidence: 0.856647315

00:15:28.320 --> 00:15:31.845 you know that really it's a,

NOTE Confidence: 0.856647315

00:15:31.845 --> 00:15:35.520 this is probably 2 most useful features

NOTE Confidence: 0.856647315

00:15:35.520 --> 00:15:38.878 that I can help me to distinguish those two,

NOTE Confidence: 0.856647315

00:15:38.880 --> 00:15:40.660 especially in small biopsies

NOTE Confidence: 0.856647315

00:15:40.660 --> 00:15:42.440 in my limited materials.

NOTE Confidence: 0.856647315

00:15:42.440 --> 00:15:46.194 And it's that first is that invert

NOTE Confidence: 0.856647315

00:15:46.194 --> 00:15:48.964 Eurociliac customer cancer they will

NOTE Confidence: 0.856647315

00:15:48.964 --> 00:15:51.815 typically have associated the typical

NOTE Confidence: 0.856647315

00:15:51.815 --> 00:15:54.595 exophytic pepper component this one.

NOTE Confidence: 0.856647315

00:15:54.600 --> 00:15:56.455 The second truly I think

NOTE Confidence: 0.856647315

00:15:56.455 --> 00:15:57.882 it's really the Tribeca,

NOTE Confidence: 0.856647315

00:15:57.882 --> 00:15:59.928 the thick Tribeca that we're seeing

NOTE Confidence: 0.856647315

00:15:59.928 --> 00:16:02.251 and the certainly you can see
NOTE Confidence: 0.856647315

00:16:02.251 --> 00:16:04.226 other other features like frequent
NOTE Confidence: 0.856647315

00:16:04.226 --> 00:16:06.528 hematotic figure PFS three KR,
NOTE Confidence: 0.856647315

00:16:06.528 --> 00:16:10.796 second seven CT 20 and and will be helpful.
NOTE Confidence: 0.856647315

00:16:10.800 --> 00:16:12.480 And again, so go back to this case,
NOTE Confidence: 0.856647315

00:16:12.480 --> 00:16:15.726 you can see here that not even
NOTE Confidence: 0.856647315

00:16:15.726 --> 00:16:16.756 to go back to further,
NOTE Confidence: 0.856647315

00:16:16.760 --> 00:16:17.346 you know,
NOTE Confidence: 0.856647315

00:16:17.346 --> 00:16:20.096 you see this is typical in Word papilloma.
NOTE Confidence: 0.856647315

00:16:20.096 --> 00:16:22.880 They have thin trabecular.
NOTE Confidence: 0.856647315

00:16:22.880 --> 00:16:26.560 But in contrast with bladder cancer you see
NOTE Confidence: 0.856647315

00:16:26.560 --> 00:16:30.158 the segment significantly thickened tobacco
NOTE Confidence: 0.856647315

00:16:30.160 --> 00:16:32.640 unlike you know here the top ones benign.
NOTE Confidence: 0.856647315

00:16:32.640 --> 00:16:34.719 You know here the bottom line you see fair,
NOTE Confidence: 0.856647315

00:16:34.720 --> 00:16:36.728 fair, fair, you know,
NOTE Confidence: 0.856647315

00:16:36.728 --> 00:16:38.546 thickened tremendous second so.

NOTE Confidence: 0.856647315
00:16:38.546 --> 00:16:40.076 So those are morphologic crew.
NOTE Confidence: 0.856647315
00:16:40.080 --> 00:16:42.840 Not sure not if you have difficult case,
NOTE Confidence: 0.856647315
00:16:42.840 --> 00:16:45.997 you're not sure you can show it.
NOTE Confidence: 0.856647315
00:16:46.000 --> 00:16:49.000 They will tell you right away no problem.
NOTE Confidence: 0.856647315
00:16:49.000 --> 00:16:51.718 And if you have more trouble,
NOTE Confidence: 0.856647315
00:16:51.720 --> 00:16:54.320 you can ask her.
NOTE Confidence: 0.856647315
00:16:54.320 --> 00:16:57.384 I'm not sure he's here now, you know.
NOTE Confidence: 0.856647315
00:16:57.384 --> 00:17:00.160 So, OK, yeah, OK.
NOTE Confidence: 0.856647315
00:17:00.160 --> 00:17:01.960 Do the Euro fishing test fast.
NOTE Confidence: 0.637998997777778
00:17:06.360 --> 00:17:08.142 So, so that's another case that
NOTE Confidence: 0.637998997777778
00:17:08.142 --> 00:17:10.019 you can just not running the
NOTE Confidence: 0.637998997777778
00:17:10.019 --> 00:17:11.879 fish now that's it could be,
NOTE Confidence: 0.637998997777778
00:17:11.880 --> 00:17:14.472 it could be helpful but most cases not
NOTE Confidence: 0.637998997777778
00:17:14.472 --> 00:17:16.880 helpful and nowadays even even better.
NOTE Confidence: 0.637998997777778
00:17:16.880 --> 00:17:19.435 We have another one marker called Tut,
NOTE Confidence: 0.637998997777778

00:17:19.440 --> 00:17:22.000 just mention that it can be you know
NOTE Confidence: 0.637998997777778

00:17:22.000 --> 00:17:24.107 unlike you know the the you know
NOTE Confidence: 0.637998997777778

00:17:24.107 --> 00:17:25.959 Cilia pipeline was just discussed.
NOTE Confidence: 0.637998997777778

00:17:25.960 --> 00:17:28.690 Tut is cannot help euciliate type
NOTE Confidence: 0.637998997777778

00:17:28.690 --> 00:17:31.219 of Lomas versus other Euciliation
NOTE Confidence: 0.637998997777778

00:17:31.219 --> 00:17:35.360 but could promote her mutation is
NOTE Confidence: 0.637998997777778

00:17:35.360 --> 00:17:38.526 almost you know always present 80%
NOTE Confidence: 0.637998997777778

00:17:38.526 --> 00:17:41.156 time in inverted Eucilia customer,
NOTE Confidence: 0.637998997777778

00:17:41.160 --> 00:17:44.838 but it's always almost always negative,
NOTE Confidence: 0.637998997777778

00:17:44.840 --> 00:17:47.556 you know Eucilia inverted type of Lomas.
NOTE Confidence: 0.637998997777778

00:17:47.560 --> 00:17:49.840 So that's something that could be
NOTE Confidence: 0.637998997777778

00:17:49.840 --> 00:17:52.218 potentially helpful if you really have
NOTE Confidence: 0.637998997777778

00:17:52.218 --> 00:17:54.183 difficult cases inverter you will
NOTE Confidence: 0.637998997777778

00:17:54.183 --> 00:17:56.793 see the platform is really firefight
NOTE Confidence: 0.637998997777778

00:17:56.793 --> 00:17:59.272 interesting machine and though it is you
NOTE Confidence: 0.637998997777778

00:17:59.272 --> 00:18:01.374 know it's a good negative to promoter

NOTE Confidence: 0.637998997777778

00:18:01.374 --> 00:18:03.594 mutation negative but it is very,

NOTE Confidence: 0.637998997777778

00:18:03.600 --> 00:18:06.876 very high preference of FGFR stream mutation.

NOTE Confidence: 0.637998997777778

00:18:06.880 --> 00:18:09.352 So again you know some you know I

NOTE Confidence: 0.637998997777778

00:18:09.352 --> 00:18:11.720 think you'll have to kind of reap it's

NOTE Confidence: 0.637998997777778

00:18:11.720 --> 00:18:15.620 not it's not one one shoe fit all.

NOTE Confidence: 0.637998997777778

00:18:15.620 --> 00:18:18.008 So you have to kind of think about,

NOTE Confidence: 0.637998997777778

00:18:18.008 --> 00:18:19.940 you know this intimate different mutation

NOTE Confidence: 0.637998997777778

00:18:20.001 --> 00:18:21.716 or the understanding the context.

NOTE Confidence: 0.637998997777778

00:18:21.720 --> 00:18:24.023 And also with you know that apparently

NOTE Confidence: 0.637998997777778

00:18:24.023 --> 00:18:26.280 you know it's definitely that you

NOTE Confidence: 0.637998997777778

00:18:26.280 --> 00:18:28.700 will see the carcinoma in in for the

NOTE Confidence: 0.637998997777778

00:18:28.700 --> 00:18:29.960 growth will in for the growth and

NOTE Confidence: 0.637998997777778

00:18:30.004 --> 00:18:31.474 in for the you know sleep papilloma.

NOTE Confidence: 0.637998997777778

00:18:31.480 --> 00:18:33.648 They have different pathogenesis

NOTE Confidence: 0.637998997777778

00:18:33.648 --> 00:18:35.274 in molecular pathways.

NOTE Confidence: 0.637998997777778

00:18:35.280 --> 00:18:37.236 And this is the view article.
NOTE Confidence: 0.637998997777778

00:18:37.240 --> 00:18:40.285 Let's not say tutorial let written by
NOTE Confidence: 0.637998997777778

00:18:40.285 --> 00:18:43.640 Doctor MO MO Acue and so a former fellow
NOTE Confidence: 0.637998997777778

00:18:43.640 --> 00:18:46.777 he's the one who will be artist Geo
NOTE Confidence: 0.637998997777778

00:18:46.777 --> 00:18:50.753 pathology fellows we have in back in Indiana.
NOTE Confidence: 0.637998997777778

00:18:50.760 --> 00:18:54.519 He's not at the Ebony Medical College.
NOTE Confidence: 0.637998997777778

00:18:54.520 --> 00:19:00.512 Brilliant geopathologist and so what's new?
NOTE Confidence: 0.637998997777778

00:19:00.512 --> 00:19:01.520 So what's new,
NOTE Confidence: 0.637998997777778

00:19:01.520 --> 00:19:02.688 what's upcoming?
NOTE Confidence: 0.637998997777778

00:19:02.688 --> 00:19:06.915 You know there's in a 2022
NOTE Confidence: 0.637998997777778

00:19:06.915 --> 00:19:08.580 September actually yeah,
NOTE Confidence: 0.637998997777778

00:19:08.580 --> 00:19:11.148 it's in the September 2222,
NOTE Confidence: 0.637998997777778

00:19:11.148 --> 00:19:13.932 you know ASUP gather and I have a
NOTE Confidence: 0.637998997777778

00:19:13.932 --> 00:19:16.048 meeting in the Consensus conference
NOTE Confidence: 0.637998997777778

00:19:16.048 --> 00:19:19.080 at the Basel in Switzerland and the
NOTE Confidence: 0.637998997777778

00:19:19.080 --> 00:19:22.360 the result is going to be released

NOTE Confidence: 0.637998997777778

00:19:22.360 --> 00:19:27.480 published in general issue of the AGSP.

NOTE Confidence: 0.637998997777778

00:19:27.480 --> 00:19:29.958 So next next month that all the

NOTE Confidence: 0.637998997777778

00:19:29.958 --> 00:19:31.840 working for working group funding

NOTE Confidence: 0.637998997777778

00:19:31.840 --> 00:19:33.966 is going to be published.

NOTE Confidence: 0.637998997777778

00:19:33.966 --> 00:19:38.073 So I'm not going to spend much of

NOTE Confidence: 0.637998997777778

00:19:38.073 --> 00:19:40.688 time to talk about each working

NOTE Confidence: 0.637998997777778

00:19:40.688 --> 00:19:42.956 groups funding but I want I one

NOTE Confidence: 0.637998997777778

00:19:42.956 --> 00:19:45.303 thing I want to say is that still

NOTE Confidence: 0.637998997777778

00:19:45.303 --> 00:19:46.806 you know that's the grading,

NOTE Confidence: 0.637998997777778

00:19:46.806 --> 00:19:48.836 you know think about grading,

NOTE Confidence: 0.637998997777778

00:19:48.840 --> 00:19:52.488 you know that you know it's I think you

NOTE Confidence: 0.637998997777778

00:19:52.488 --> 00:19:55.232 know that's you know count grading is

NOTE Confidence: 0.637998997777778

00:19:55.232 --> 00:19:58.240 built upon the one we have back in 1998,

NOTE Confidence: 0.637998997777778

00:19:58.240 --> 00:19:59.200 ladder grading,

NOTE Confidence: 0.637998997777778

00:19:59.200 --> 00:20:01.822 the low grade, high grade.

NOTE Confidence: 0.637998997777778

00:20:01.822 --> 00:20:05.368 And so that's the fundamentals framework

NOTE Confidence: 0.637998997777778

00:20:05.368 --> 00:20:08.952 we have established back to 1998,

NOTE Confidence: 0.637998997777778

00:20:08.952 --> 00:20:10.680 almost 30 years ago.

NOTE Confidence: 0.637998997777778

00:20:10.680 --> 00:20:11.772 Nothing has changed,

NOTE Confidence: 0.637998997777778

00:20:11.772 --> 00:20:13.956 but if you look at Prostate,

NOTE Confidence: 0.637998997777778

00:20:13.960 --> 00:20:15.796 how many revision had gone through?

NOTE Confidence: 0.637998997777778

00:20:15.800 --> 00:20:17.355 We can renal cell customer

NOTE Confidence: 0.637998997777778

00:20:17.355 --> 00:20:18.599 how many are fishing.

NOTE Confidence: 0.637998997777778

00:20:18.600 --> 00:20:23.456 So we felt that you know it's the

NOTE Confidence: 0.637998997777778

00:20:23.456 --> 00:20:27.152 work farewell maybe we need to some

NOTE Confidence: 0.637998997777778

00:20:27.160 --> 00:20:30.400 refinement and and get additional you

NOTE Confidence: 0.637998997777778

00:20:30.400 --> 00:20:34.155 know so this is you know we have to

NOTE Confidence: 0.637998997777778

00:20:34.155 --> 00:20:35.750 understand you know breeding especially

NOTE Confidence: 0.603966202941176

00:20:35.807 --> 00:20:38.075 in the bladder it's it's spectrum disease.

NOTE Confidence: 0.603966202941176

00:20:38.080 --> 00:20:42.200 It's not always black white you know low

NOTE Confidence: 0.603966202941176

00:20:42.200 --> 00:20:44.017 grade heart rate positive, negative.

NOTE Confidence: 0.603966202941176

00:20:44.017 --> 00:20:46.702 It's really spectrum disease in

NOTE Confidence: 0.603966202941176

00:20:46.702 --> 00:20:49.250 the 1997 three W2 grading system

NOTE Confidence: 0.603966202941176

00:20:49.250 --> 00:20:51.260 that many old generation passage

NOTE Confidence: 0.603966202941176

00:20:51.326 --> 00:20:53.346 probably more familiar with that

NOTE Confidence: 0.603966202941176

00:20:53.346 --> 00:20:56.200 it's grade 123 and in the 2004 and

NOTE Confidence: 0.565217755555555

00:20:58.840 --> 00:21:01.480 after that was considered low grade

NOTE Confidence: 0.565217755555555

00:21:01.480 --> 00:21:06.352 heart grade # lump is another vanishing

NOTE Confidence: 0.565217755555555

00:21:06.352 --> 00:21:10.754 cancer that with the increasing incidence

NOTE Confidence: 0.565217755555555

00:21:10.754 --> 00:21:14.373 of being called and and services so

NOTE Confidence: 0.565217755555555

00:21:14.373 --> 00:21:17.782 so but in general I think this is a

NOTE Confidence: 0.565217755555555

00:21:17.782 --> 00:21:22.000 kind of the current those are two most

NOTE Confidence: 0.565217755555555

00:21:22.000 --> 00:21:24.135 commonly used grading system since

NOTE Confidence: 0.565217755555555

00:21:24.135 --> 00:21:26.712 in the especially in the European

NOTE Confidence: 0.565217755555555

00:21:26.712 --> 00:21:30.130 side in the 1973 W grade sipping used

NOTE Confidence: 0.565217755555555

00:21:30.130 --> 00:21:35.440 and this is a Eau prognostic factor

NOTE Confidence: 0.565217755555555

00:21:35.440 --> 00:21:38.888 risk group that's been most popular
NOTE Confidence: 0.5652177555555555

00:21:38.888 --> 00:21:42.120 widely used in the European countries
NOTE Confidence: 0.5652177555555555

00:21:42.120 --> 00:21:44.968 and this is you know this you know
NOTE Confidence: 0.5652177555555555

00:21:44.968 --> 00:21:47.244 this paper was published you know the
NOTE Confidence: 0.5652177555555555

00:21:47.244 --> 00:21:49.246 guideline was published in the 2021
NOTE Confidence: 0.5652177555555555

00:21:49.246 --> 00:21:52.814 and one one thing one change they have
NOTE Confidence: 0.5652177555555555

00:21:52.814 --> 00:21:56.626 made is that they have a kind of a
NOTE Confidence: 0.5652177555555555

00:21:56.626 --> 00:21:59.488 stratified you know in the previous
NOTE Confidence: 0.5652177555555555

00:21:59.488 --> 00:22:03.344 edition they only use 1973 W 2 grading
NOTE Confidence: 0.5652177555555555

00:22:03.344 --> 00:22:07.584 123 but in this new flushing they have
NOTE Confidence: 0.5652177555555555

00:22:07.584 --> 00:22:11.394 incorporate so they have proposed that
NOTE Confidence: 0.5652177555555555

00:22:11.400 --> 00:22:16.860 combination so reporting both W 2/19/73
NOTE Confidence: 0.5652177555555555

00:22:16.860 --> 00:22:20.160 and current low grade heart rate.
NOTE Confidence: 0.5652177555555555

00:22:20.160 --> 00:22:23.562 So very nicely using this combined hybrid
NOTE Confidence: 0.5652177555555555

00:22:23.562 --> 00:22:27.120 system they can further nicely stratify
NOTE Confidence: 0.5652177555555555

00:22:27.120 --> 00:22:30.475 patient into different prognosis group.

NOTE Confidence: 0.5652177555555555
00:22:30.480 --> 00:22:32.370 So that's really you know that's
NOTE Confidence: 0.5652177555555555
00:22:32.370 --> 00:22:34.878 kind of why you know the very nice
NOTE Confidence: 0.5652177555555555
00:22:34.880 --> 00:22:39.031 contribution and this is in the in
NOTE Confidence: 0.5652177555555555
00:22:39.031 --> 00:22:41.173 the paper published in the European
NOTE Confidence: 0.5652177555555555
00:22:41.173 --> 00:22:44.240 your large focus and that also have
NOTE Confidence: 0.5652177555555555
00:22:44.240 --> 00:22:48.822 issued it's kind of its own opinion
NOTE Confidence: 0.5652177555555555
00:22:48.822 --> 00:22:51.666 and and here's in another survey
NOTE Confidence: 0.5652177555555555
00:22:51.666 --> 00:22:55.368 we did was publishing the European
NOTE Confidence: 0.5652177555555555
00:22:55.368 --> 00:22:58.904 urology as well and and in the this
NOTE Confidence: 0.5652177555555555
00:22:58.904 --> 00:23:01.280 is the surveys conduct among both
NOTE Confidence: 0.5652177555555555
00:23:01.280 --> 00:23:03.375 US and European pathologists and
NOTE Confidence: 0.5652177555555555
00:23:03.375 --> 00:23:06.619 we can see here still in almost you
NOTE Confidence: 0.5652177555555555
00:23:06.619 --> 00:23:08.954 know there's a 40% of pathologists
NOTE Confidence: 0.5652177555555555
00:23:08.954 --> 00:23:11.696 you know institutions you know they
NOTE Confidence: 0.5652177555555555
00:23:11.696 --> 00:23:16.331 still using this combined system 1973
NOTE Confidence: 0.5652177555555555

00:23:16.331 --> 00:23:19.997 and at the 2004 grading system.
NOTE Confidence: 0.5652177555555555

00:23:20.000 --> 00:23:23.484 So I think let's this is some newly
NOTE Confidence: 0.5652177555555555

00:23:23.484 --> 00:23:26.018 proposed you know we feel that you
NOTE Confidence: 0.5652177555555555

00:23:26.018 --> 00:23:28.658 know that maybe less the Poundland
NOTE Confidence: 0.5652177555555555

00:23:28.658 --> 00:23:31.501 probably can be completely gone because
NOTE Confidence: 0.5652177555555555

00:23:31.501 --> 00:23:34.286 treatment and prognosis everything is
NOTE Confidence: 0.5652177555555555

00:23:34.286 --> 00:23:36.804 almost identical guidelines you know
NOTE Confidence: 0.5652177555555555

00:23:36.804 --> 00:23:39.360 same as a low grade so so that entity
NOTE Confidence: 0.5652177555555555

00:23:39.435 --> 00:23:41.612 probably can be gone and again it's
NOTE Confidence: 0.5652177555555555

00:23:41.612 --> 00:23:44.006 a you know it's on the proposal and
NOTE Confidence: 0.5652177555555555

00:23:44.006 --> 00:23:46.150 and so this is a four tiered grading.
NOTE Confidence: 0.5652177555555555

00:23:46.150 --> 00:23:48.476 So I think the main thing is that we
NOTE Confidence: 0.5652177555555555

00:23:48.476 --> 00:23:50.036 all know this tumor grade especially
NOTE Confidence: 0.5652177555555555

00:23:50.036 --> 00:23:52.449 in the in the current double chip in
NOTE Confidence: 0.5652177555555555

00:23:52.449 --> 00:23:53.984 the current classification not all
NOTE Confidence: 0.5652177555555555

00:23:53.984 --> 00:23:56.112 hardware have a same you know some

NOTE Confidence: 0.5652177555555555
00:23:56.112 --> 00:23:58.378 you can almost definitely you can
NOTE Confidence: 0.5652177555555555
00:23:58.378 --> 00:24:00.760 feel that you know some morphology
NOTE Confidence: 0.5652177555555555
00:24:00.760 --> 00:24:03.905 we don't have a trouble to tell you
NOTE Confidence: 0.5652177555555555
00:24:03.905 --> 00:24:06.864 know very very low rate or # lump and
NOTE Confidence: 0.5652177555555555
00:24:06.864 --> 00:24:09.625 or hardware end and but we really we
NOTE Confidence: 0.5652177555555555
00:24:09.625 --> 00:24:11.353 have something you know in between you
NOTE Confidence: 0.5652177555555555
00:24:11.353 --> 00:24:14.098 know there's a grade zone area it's a
NOTE Confidence: 0.5652177555555555
00:24:14.098 --> 00:24:17.798 grade 2 low grade hard grade or hard grade.
NOTE Confidence: 0.5652177555555555
00:24:17.800 --> 00:24:20.504 So I think that's really you have to think
NOTE Confidence: 0.5652177555555555
00:24:20.504 --> 00:24:22.928 about you know there's a again the grading,
NOTE Confidence: 0.5652177555555555
00:24:22.928 --> 00:24:24.240 you know that's a,
NOTE Confidence: 0.5652177555555555
00:24:24.240 --> 00:24:26.235 you know it's a spectrum of disease,
NOTE Confidence: 0.5652177555555555
00:24:26.240 --> 00:24:27.760 it's not you know so.
NOTE Confidence: 0.5652177555555555
00:24:27.760 --> 00:24:30.328 So I think that would be what we'll
NOTE Confidence: 0.5652177555555555
00:24:30.328 --> 00:24:32.579 see hopefully in in the coming years
NOTE Confidence: 0.5652177555555555

00:24:32.579 --> 00:24:35.039 there will be more study conducted and
NOTE Confidence: 0.641216560833333

00:24:35.040 --> 00:24:37.680 more have more defined criterias into
NOTE Confidence: 0.641216560833333

00:24:37.680 --> 00:24:40.708 how you know help out the clinicians
NOTE Confidence: 0.641216560833333

00:24:40.708 --> 00:24:43.848 to further strictify patients for
NOTE Confidence: 0.641216560833333

00:24:43.848 --> 00:24:47.360 for additional treatment. All right.
NOTE Confidence: 0.641216560833333

00:24:47.360 --> 00:24:52.065 So let's switch gear talk about flat
NOTE Confidence: 0.641216560833333

00:24:52.065 --> 00:24:56.115 leverage and I'm not sure you know
NOTE Confidence: 0.641216560833333

00:24:56.115 --> 00:24:58.099 I think now that's you know that you
NOTE Confidence: 0.641216560833333

00:24:58.099 --> 00:25:00.091 know that you know so one thing keep
NOTE Confidence: 0.641216560833333

00:25:00.091 --> 00:25:02.272 in mind is that you know the you know
NOTE Confidence: 0.641216560833333

00:25:02.272 --> 00:25:03.840 Doubletrol is constantly evolving.
NOTE Confidence: 0.641216560833333

00:25:03.840 --> 00:25:06.552 It's not static to you know this this
NOTE Confidence: 0.641216560833333

00:25:06.552 --> 00:25:09.639 is news in the in this newest published
NOTE Confidence: 0.641216560833333

00:25:09.640 --> 00:25:14.440 old classification and the the non all
NOTE Confidence: 0.641216560833333

00:25:14.440 --> 00:25:18.340 the in in the flat leash only you Lucila
NOTE Confidence: 0.641216560833333

00:25:18.340 --> 00:25:20.920 carcinoma in such has been included.

NOTE Confidence: 0.641216560833333

00:25:20.920 --> 00:25:23.678 It's kind of a much simplified version.

NOTE Confidence: 0.641216560833333

00:25:23.680 --> 00:25:26.392 So the only one issue they talk about

NOTE Confidence: 0.641216560833333

00:25:26.392 --> 00:25:29.429 it there's only the issue that we have

NOTE Confidence: 0.641216560833333

00:25:29.429 --> 00:25:31.614 abundant knowledge we know what it

NOTE Confidence: 0.641216560833333

00:25:31.614 --> 00:25:34.223 is and for many years for decades and

NOTE Confidence: 0.641216560833333

00:25:34.223 --> 00:25:36.890 you'll see the customs and satchel is

NOTE Confidence: 0.641216560833333

00:25:36.963 --> 00:25:39.834 one for the worst CRS in the human body.

NOTE Confidence: 0.641216560833333

00:25:39.840 --> 00:25:41.188 It killed the patient.

NOTE Confidence: 0.641216560833333

00:25:41.188 --> 00:25:43.763 So if you want to choose between

NOTE Confidence: 0.641216560833333

00:25:43.763 --> 00:25:46.360 Prost cancer or kidney cancer versus

NOTE Confidence: 0.6536580725

00:25:48.600 --> 00:25:50.056 CRM T1 kidney cancer,

NOTE Confidence: 0.6536580725

00:25:50.056 --> 00:25:52.959 I would rather prefer to have those you

NOTE Confidence: 0.6536580725

00:25:52.960 --> 00:25:57.620 know cancer by CISCIS in this study

NOTE Confidence: 0.6536580725

00:25:57.620 --> 00:26:01.028 we conducted over at the male and with

NOTE Confidence: 0.6536580725

00:26:01.028 --> 00:26:04.320 over 10 years follow up in a patient,

NOTE Confidence: 0.6536580725

00:26:04.320 --> 00:26:07.568 the 15 year cancer specific survival for
NOTE Confidence: 0.6536580725

00:26:07.568 --> 00:26:12.376 bladder cancer that's only 79% or 80%.
NOTE Confidence: 0.6536580725

00:26:12.376 --> 00:26:15.384 So really you know this is a it's
NOTE Confidence: 0.6536580725

00:26:15.384 --> 00:26:17.596 not you know innocuous you know that.
NOTE Confidence: 0.6536580725

00:26:17.600 --> 00:26:19.826 So again you can of course you
NOTE Confidence: 0.6536580725

00:26:19.826 --> 00:26:21.759 can argue about other things.
NOTE Confidence: 0.6536580725

00:26:21.760 --> 00:26:25.048 So let's go back you know for personally
NOTE Confidence: 0.6536580725

00:26:25.048 --> 00:26:28.280 I know I still laugh like the framework
NOTE Confidence: 0.6536580725

00:26:28.359 --> 00:26:31.464 you know that has been laid out in the
NOTE Confidence: 0.6536580725

00:26:31.464 --> 00:26:33.424 2016 double ship classification in
NOTE Confidence: 0.6536580725

00:26:33.424 --> 00:26:36.078 terms of especially in this flat leaching,
NOTE Confidence: 0.6536580725

00:26:36.080 --> 00:26:40.840 I think you know that's in the WCO 2016
NOTE Confidence: 0.6536580725

00:26:40.840 --> 00:26:42.968 classification for that leaching. Well,
NOTE Confidence: 0.6536580725

00:26:42.968 --> 00:26:44.840 you know there's a you will see the pepperon,
NOTE Confidence: 0.6536580725

00:26:44.840 --> 00:26:46.440 you will see this picture,
NOTE Confidence: 0.6536580725

00:26:46.440 --> 00:26:48.197 you will see the customings are true.

NOTE Confidence: 0.6536580725

00:26:48.200 --> 00:26:49.732 We all feel familiar.

NOTE Confidence: 0.6536580725

00:26:49.732 --> 00:26:52.759 But they also introduced a very you know,

NOTE Confidence: 0.6536580725

00:26:52.760 --> 00:26:56.120 somewhat controversial leasing at that time.

NOTE Confidence: 0.6536580725

00:26:56.120 --> 00:26:58.920 It's called Euro Celia profession

NOTE Confidence: 0.6536580725

00:26:58.920 --> 00:27:00.552 of uncertainment potential.

NOTE Confidence: 0.6536580725

00:27:00.552 --> 00:27:03.624 In the 2022 those two leachings

NOTE Confidence: 0.6536580725

00:27:03.624 --> 00:27:05.160 pretty much gone.

NOTE Confidence: 0.6536580725

00:27:05.160 --> 00:27:09.176 It's only CRS being left in the current

NOTE Confidence: 0.6536580725

00:27:09.176 --> 00:27:14.458 classification and from a you know in

NOTE Confidence: 0.6536580725

00:27:14.458 --> 00:27:17.384 terms of the carcinogenetics it's a long

NOTE Confidence: 0.6536580725

00:27:17.384 --> 00:27:19.640 standing theory not theory anymore.

NOTE Confidence: 0.6536580725

00:27:19.640 --> 00:27:22.852 We we all know from knowledge of

NOTE Confidence: 0.6536580725

00:27:22.852 --> 00:27:26.254 human almost 100 years that you know

NOTE Confidence: 0.6536580725

00:27:26.254 --> 00:27:29.395 Brad the tumor you know silicosis

NOTE Confidence: 0.6536580725

00:27:29.395 --> 00:27:32.724 genetics is prime example of a field

NOTE Confidence: 0.6536580725

00:27:32.724 --> 00:27:35.479 of fact and and it's a it's not you
NOTE Confidence: 0.6536580725

00:27:35.479 --> 00:27:38.556 know it is multiple it's still the
NOTE Confidence: 0.6536580725

00:27:38.556 --> 00:27:41.016 fact it's not involving different
NOTE Confidence: 0.6536580725

00:27:41.016 --> 00:27:43.338 lesions different pathways and this
NOTE Confidence: 0.6536580725

00:27:43.338 --> 00:27:45.798 kind of well established at least
NOTE Confidence: 0.6536580725

00:27:45.798 --> 00:27:48.304 it's from the basic science point of
NOTE Confidence: 0.6536580725

00:27:48.304 --> 00:27:51.069 view we know that you know there's
NOTE Confidence: 0.6536580725

00:27:51.069 --> 00:27:53.497 a hyperpay sure display sure you
NOTE Confidence: 0.6536580725

00:27:53.497 --> 00:27:56.157 know it's it's well much more well
NOTE Confidence: 0.6536580725

00:27:56.157 --> 00:27:58.600 established in animal models that you
NOTE Confidence: 0.6536580725

00:27:58.600 --> 00:28:01.120 know there's CRS you know different
NOTE Confidence: 0.6536580725

00:28:01.192 --> 00:28:03.256 molecular pathway genetic mutation
NOTE Confidence: 0.6536580725

00:28:03.256 --> 00:28:06.028 that has been involved in terms of
NOTE Confidence: 0.6536580725

00:28:06.028 --> 00:28:08.067 the you know also we know if you
NOTE Confidence: 0.6536580725

00:28:08.067 --> 00:28:09.981 look at the supplied cases there's
NOTE Confidence: 0.6536580725

00:28:09.981 --> 00:28:12.426 always you know ways on areas that

NOTE Confidence: 0.6536580725

00:28:12.426 --> 00:28:14.201 you know some squeezing bordering

NOTE Confidence: 0.6536580725

00:28:14.201 --> 00:28:16.036 between CRS and complete normal.

NOTE Confidence: 0.6536580725

00:28:16.036 --> 00:28:18.250 And this paper will have partially

NOTE Confidence: 0.6536580725

00:28:18.321 --> 00:28:20.554 numbers are probably one of the fair

NOTE Confidence: 0.6536580725

00:28:20.554 --> 00:28:22.873 few paper that we did you know able

NOTE Confidence: 0.6536580725

00:28:22.873 --> 00:28:25.368 to follow up the patient long term

NOTE Confidence: 0.6536580725

00:28:25.368 --> 00:28:27.552 and you'll see that this patient

NOTE Confidence: 0.6536580725

00:28:27.552 --> 00:28:29.838 in the using we found that.

NOTE Confidence: 0.6536580725

00:28:29.840 --> 00:28:33.467 So it's not as bad as the CRS but

NOTE Confidence: 0.6536580725

00:28:33.467 --> 00:28:36.820 indeed about 16% of patient will have

NOTE Confidence: 0.6536580725

00:28:36.820 --> 00:28:39.960 progressed into CRS or other lesions.

NOTE Confidence: 0.6536580725

00:28:39.960 --> 00:28:43.474 So it's not complete benign it does

NOTE Confidence: 0.6536580725

00:28:43.474 --> 00:28:46.405 exist and if you look in the cell you

NOTE Confidence: 0.6536580725

00:28:46.405 --> 00:28:48.200 know that's you can you can you know

NOTE Confidence: 0.6536580725

00:28:48.200 --> 00:28:50.348 you can argue you know this cell is

NOTE Confidence: 0.6536580725

00:28:50.348 --> 00:28:52.868 you know I was maybe you know it's
NOTE Confidence: 0.6536580725

00:28:52.868 --> 00:28:56.007 it's it's CIS maybe not but it's not
NOTE Confidence: 0.6536580725

00:28:56.007 --> 00:28:58.330 probably not complete reach to the
NOTE Confidence: 0.6536580725

00:28:58.330 --> 00:29:00.766 left of the logical tape here you
NOTE Confidence: 0.6536580725

00:29:00.842 --> 00:29:03.280 know in common diagnosis CIS how
NOTE Confidence: 0.6536580725

00:29:03.280 --> 00:29:04.560 many cells you need.
NOTE Confidence: 0.6536580725

00:29:04.560 --> 00:29:06.416 You don't you only need one cell to
NOTE Confidence: 0.6536580725

00:29:06.416 --> 00:29:08.150 make that I'm I'm not psychologist
NOTE Confidence: 0.6536580725

00:29:08.150 --> 00:29:09.974 but there's criteria you only need
NOTE Confidence: 0.645403736

00:29:10.030 --> 00:29:12.053 one cell unlike cervical CRS you need
NOTE Confidence: 0.645403736

00:29:12.053 --> 00:29:14.208 the full thickness in in the bladder
NOTE Confidence: 0.645403736

00:29:14.208 --> 00:29:16.759 you only need one cell called the CRS.
NOTE Confidence: 0.645403736

00:29:16.760 --> 00:29:18.000 So the cell, you know,
NOTE Confidence: 0.645403736

00:29:18.000 --> 00:29:20.079 again you can look at the cells here and
NOTE Confidence: 0.645403736

00:29:20.080 --> 00:29:22.033 well you can argue some cell may be reaching,
NOTE Confidence: 0.645403736

00:29:22.040 --> 00:29:23.626 yeah, but but it said, you know,

NOTE Confidence: 0.645403736

00:29:23.626 --> 00:29:24.891 it's kind of embodiment between

NOTE Confidence: 0.645403736

00:29:24.891 --> 00:29:26.150 you something, you know,

NOTE Confidence: 0.645403736

00:29:26.150 --> 00:29:28.400 it's not complete normal and it's

NOTE Confidence: 0.645403736

00:29:28.400 --> 00:29:32.320 it's a fully approved immune staining,

NOTE Confidence: 0.645403736

00:29:32.320 --> 00:29:35.356 P53 immune staining or C20 staining.

NOTE Confidence: 0.645403736

00:29:35.360 --> 00:29:38.033 So this is a lesion that it does exist.

NOTE Confidence: 0.645403736

00:29:38.040 --> 00:29:40.800 And how about this controversial

NOTE Confidence: 0.645403736

00:29:40.800 --> 00:29:43.560 lesion called Euro Celia provision

NOTE Confidence: 0.645403736

00:29:43.652 --> 00:29:45.878 of uncertainment potential.

NOTE Confidence: 0.645403736

00:29:45.880 --> 00:29:47.896 This is the machine that has

NOTE Confidence: 0.645403736

00:29:47.896 --> 00:29:50.074 been proposed in the W-2 2016,

NOTE Confidence: 0.645403736

00:29:50.074 --> 00:29:52.159 including actually including two leash.

NOTE Confidence: 0.645403736

00:29:52.160 --> 00:29:55.040 One is a type of you city have a patient,

NOTE Confidence: 0.645403736

00:29:55.040 --> 00:29:56.560 the other one is flat,

NOTE Confidence: 0.645403736

00:29:56.560 --> 00:29:58.120 you will city have a patient.

NOTE Confidence: 0.645403736

00:29:58.120 --> 00:30:00.955 And those are, I think by the name implied,
NOTE Confidence: 0.645403736

00:30:00.960 --> 00:30:02.952 you know that you know this is leaching.
NOTE Confidence: 0.645403736

00:30:02.952 --> 00:30:05.932 That is kind of, you see there's a,
NOTE Confidence: 0.645403736

00:30:05.932 --> 00:30:07.600 you know, incipient
NOTE Confidence: 0.536346043333333

00:30:09.640 --> 00:30:10.760 almost like, you know,
NOTE Confidence: 0.536346043333333

00:30:10.760 --> 00:30:12.160 there's a pity structure but
NOTE Confidence: 0.536346043333333

00:30:12.160 --> 00:30:13.560 it's not fair well formed.
NOTE Confidence: 0.536346043333333

00:30:13.560 --> 00:30:15.740 You also see if rich, fast school
NOTE Confidence: 0.536346043333333

00:30:15.740 --> 00:30:18.236 chair on the underneath and the flat,
NOTE Confidence: 0.536346043333333

00:30:18.240 --> 00:30:19.440 you'll see you have a patient.
NOTE Confidence: 0.536346043333333

00:30:19.440 --> 00:30:21.030 It's very simple.
NOTE Confidence: 0.536346043333333

00:30:21.030 --> 00:30:22.792 It is very, very tremendous.
NOTE Confidence: 0.536346043333333

00:30:22.792 --> 00:30:24.640 Second that you'll see them so.
NOTE Confidence: 0.536346043333333

00:30:24.640 --> 00:30:26.416 And the jewellery,
NOTE Confidence: 0.536346043333333

00:30:26.416 --> 00:30:27.356 I think that you know,
NOTE Confidence: 0.536346043333333

00:30:27.360 --> 00:30:28.480 the jewellery is still up.

NOTE Confidence: 0.536346043333333

00:30:28.480 --> 00:30:30.840 It's not complete that yet,

NOTE Confidence: 0.536346043333333

00:30:30.840 --> 00:30:33.400 and at least you know in this paper

NOTE Confidence: 0.536346043333333

00:30:33.400 --> 00:30:35.549 we're publishing this year in the

NOTE Confidence: 0.536346043333333

00:30:35.549 --> 00:30:36.993 modern pathology we analyzing,

NOTE Confidence: 0.536346043333333

00:30:37.000 --> 00:30:39.835 you know over 52 cases of pepper.

NOTE Confidence: 0.536346043333333

00:30:39.840 --> 00:30:41.345 You will still have a pay share

NOTE Confidence: 0.536346043333333

00:30:41.345 --> 00:30:42.800 you know at least with fun.

NOTE Confidence: 0.536346043333333

00:30:42.800 --> 00:30:44.924 You know we compare this leaching

NOTE Confidence: 0.536346043333333

00:30:44.924 --> 00:30:47.445 with the norful leaching and MP

NOTE Confidence: 0.536346043333333

00:30:47.445 --> 00:30:50.040 machine code is a single user

NOTE Confidence: 0.536346043333333

00:30:50.040 --> 00:30:52.217 customer low grade and we found in

NOTE Confidence: 0.536346043333333

00:30:52.217 --> 00:30:53.787 a significant number of patients

NOTE Confidence: 0.536346043333333

00:30:53.787 --> 00:30:55.515 we'll have to the mutation again

NOTE Confidence: 0.536346043333333

00:30:55.515 --> 00:30:57.140 to the mutation along doesn't

NOTE Confidence: 0.536346043333333

00:30:57.140 --> 00:30:59.108 tell you it's cancer not cancer

NOTE Confidence: 0.536346043333333

00:30:59.108 --> 00:31:01.575 and at least you know this is not
NOTE Confidence: 0.5363460433333333

00:31:01.575 --> 00:31:03.050 complete reactive normal process.
NOTE Confidence: 0.5363460433333333

00:31:03.050 --> 00:31:06.200 You can argue you know this is a
NOTE Confidence: 0.5363460433333333

00:31:06.200 --> 00:31:07.905 true precursor not true because
NOTE Confidence: 0.5363460433333333

00:31:07.905 --> 00:31:10.929 but at least I think this should be
NOTE Confidence: 0.5363460433333333

00:31:10.929 --> 00:31:13.311 bringing to the our community again
NOTE Confidence: 0.5363460433333333

00:31:13.320 --> 00:31:15.808 really deserve fuller investigation
NOTE Confidence: 0.5363460433333333

00:31:15.808 --> 00:31:19.736 so and for the bladder I think you
NOTE Confidence: 0.5363460433333333

00:31:19.736 --> 00:31:21.368 know it's really you know that's
NOTE Confidence: 0.5363460433333333

00:31:21.368 --> 00:31:23.859 a it's you know if you're looking
NOTE Confidence: 0.5363460433333333

00:31:23.859 --> 00:31:25.299 at the virtual classification
NOTE Confidence: 0.5363460433333333

00:31:25.365 --> 00:31:27.080 in CIS it's super simplified.
NOTE Confidence: 0.5363460433333333

00:31:27.080 --> 00:31:29.768 So when you again special for for
NOTE Confidence: 0.5363460433333333

00:31:29.768 --> 00:31:32.064 the Chinese you know that yes that's
NOTE Confidence: 0.5363460433333333

00:31:32.064 --> 00:31:34.079 our battle that's how we follow
NOTE Confidence: 0.5363460433333333

00:31:34.080 --> 00:31:36.066 guidelines but it's you have to

NOTE Confidence: 0.536346043333333
00:31:36.066 --> 00:31:37.857 understand the you know molecular
NOTE Confidence: 0.536346043333333
00:31:37.857 --> 00:31:40.245 mechanism the pathway go beyond that
NOTE Confidence: 0.536346043333333
00:31:40.245 --> 00:31:42.128 looking through and understand the
NOTE Confidence: 0.536346043333333
00:31:42.128 --> 00:31:44.319 you know that you know it's just
NOTE Confidence: 0.536346043333333
00:31:44.319 --> 00:31:47.195 some you know some some difficult
NOTE Confidence: 0.536346043333333
00:31:47.195 --> 00:31:49.599 entities you know it's completely
NOTE Confidence: 0.536346043333333
00:31:49.599 --> 00:31:51.753 ignored will not will not make
NOTE Confidence: 0.536346043333333
00:31:51.753 --> 00:31:54.044 things go away you know so I just
NOTE Confidence: 0.536346043333333
00:31:54.044 --> 00:31:56.078 I think it's a we should always
NOTE Confidence: 0.536346043333333
00:31:56.078 --> 00:31:58.108 tactically challenge you know just
NOTE Confidence: 0.536346043333333
00:31:58.108 --> 00:32:00.910 you know to look in things deeper
NOTE Confidence: 0.536346043333333
00:32:00.910 --> 00:32:03.647 at the deeper level that's how we
NOTE Confidence: 0.536346043333333
00:32:03.647 --> 00:32:07.512 at the France our field and so go
NOTE Confidence: 0.536346043333333
00:32:07.512 --> 00:32:10.213 back and to the W 222 classification
NOTE Confidence: 0.536346043333333
00:32:10.213 --> 00:32:12.799 income of in base USA customer.
NOTE Confidence: 0.536346043333333

00:32:12.800 --> 00:32:14.865 I think the only things that has
NOTE Confidence: 0.536346043333333

00:32:14.865 --> 00:32:16.714 been changed it's really it's a
NOTE Confidence: 0.536346043333333

00:32:16.714 --> 00:32:18.821 terminology you know we call them the
NOTE Confidence: 0.536346043333333

00:32:18.881 --> 00:32:20.857 the ferrant you know it used to be
NOTE Confidence: 0.536346043333333

00:32:20.857 --> 00:32:23.252 we call it histological ferrant of
NOTE Confidence: 0.536346043333333

00:32:23.252 --> 00:32:25.676 you know plasma subtle you invasive
NOTE Confidence: 0.536346043333333

00:32:25.676 --> 00:32:28.551 you will see customer so now we have
NOTE Confidence: 0.536346043333333

00:32:28.551 --> 00:32:30.911 kind of calling them you know just a
NOTE Confidence: 0.536346043333333

00:32:30.983 --> 00:32:33.437 histologic subtype so that's not to
NOTE Confidence: 0.536346043333333

00:32:33.437 --> 00:32:35.788 not afford confusing with the gene
NOTE Confidence: 0.536346043333333

00:32:35.788 --> 00:32:38.262 or teaching that was called and in
NOTE Confidence: 0.536346043333333

00:32:38.262 --> 00:32:40.719 terms of a number of parent we've
NOTE Confidence: 0.536346043333333

00:32:40.719 --> 00:32:43.187 seen it's you know the terminology
NOTE Confidence: 0.536346043333333

00:32:43.187 --> 00:32:46.297 is remain the same and and they are
NOTE Confidence: 0.536346043333333

00:32:46.297 --> 00:32:49.144 very you know kind of largely has
NOTE Confidence: 0.536346043333333

00:32:49.144 --> 00:32:53.808 not been changed let me let me give

NOTE Confidence: 0.536346043333333
00:32:53.808 --> 00:32:56.384 our resident a quiz you know that
NOTE Confidence: 0.536346043333333
00:32:56.384 --> 00:32:59.931 we we we have a a slide conference
NOTE Confidence: 0.536346043333333
00:32:59.931 --> 00:33:03.765 and this so we talk about you know
NOTE Confidence: 0.536346043333333
00:33:03.765 --> 00:33:05.458 this so-called prolific lesions
NOTE Confidence: 0.536346043333333
00:33:05.458 --> 00:33:08.300 that you know we have all those
NOTE Confidence: 0.536346043333333
00:33:08.370 --> 00:33:10.470 different differential diagnosis in
NOTE Confidence: 0.536346043333333
00:33:10.470 --> 00:33:13.800 this case and let's see who attended
NOTE Confidence: 0.536346043333333
00:33:13.800 --> 00:33:16.080 this morning's conference you know
NOTE Confidence: 0.855248742222222
00:33:16.161 --> 00:33:19.073 so so if you remember anything OK good.
NOTE Confidence: 0.855248742222222
00:33:19.080 --> 00:33:20.280 So what's your diagnosis.
NOTE Confidence: 0.16971791
00:33:29.730 --> 00:33:35.168 Well OK let's let's the diagnosis so
NOTE Confidence: 0.16971791
00:33:35.170 --> 00:33:37.447 so why why is why you think about that
NOTE Confidence: 0.536093294
00:33:55.960 --> 00:33:59.060 glance small fuse gland no
NOTE Confidence: 0.536093294
00:33:59.060 --> 00:34:02.528 big open looming so and good.
NOTE Confidence: 0.536093294
00:34:02.528 --> 00:34:05.472 So you don't need molecular you can make
NOTE Confidence: 0.536093294

00:34:05.472 --> 00:34:07.719 diamonds purely based on morphology.
NOTE Confidence: 0.536093294

00:34:07.720 --> 00:34:09.856 Very good. OK. So that's indeed
NOTE Confidence: 0.536093294

00:34:09.856 --> 00:34:12.280 that's the case of nest variant,
NOTE Confidence: 0.536093294

00:34:12.280 --> 00:34:14.653 you will see the carcinoma and and
NOTE Confidence: 0.536093294

00:34:14.653 --> 00:34:17.280 also if you want to do molecular
NOTE Confidence: 0.536093294

00:34:17.280 --> 00:34:19.578 study and certainly you can the
NOTE Confidence: 0.536093294

00:34:19.658 --> 00:34:22.238 truth promoter is really fantastic.
NOTE Confidence: 0.536093294

00:34:22.240 --> 00:34:26.920 That's a paper punch from my my friends,
NOTE Confidence: 0.536093294

00:34:26.920 --> 00:34:30.139 you know and abdomen and histopathology
NOTE Confidence: 0.536093294

00:34:30.139 --> 00:34:33.160 you know that more than 62% patient
NOTE Confidence: 0.536093294

00:34:33.160 --> 00:34:35.420 with the next family you will see
NOTE Confidence: 0.536093294

00:34:35.420 --> 00:34:37.424 the customer will be positive for
NOTE Confidence: 0.536093294

00:34:37.424 --> 00:34:39.688 the term mutation and also you know
NOTE Confidence: 0.536093294

00:34:39.688 --> 00:34:41.476 kind of interestingly but a few
NOTE Confidence: 0.536093294

00:34:41.480 --> 00:34:43.592 patients will have FC past three
NOTE Confidence: 0.536093294

00:34:43.592 --> 00:34:45.965 mutation and the tumor belong to

NOTE Confidence: 0.536093294

00:34:45.965 --> 00:34:47.757 this luminal molecular subtypes.

NOTE Confidence: 0.536093294

00:34:47.760 --> 00:34:50.080 And indeed third nutrition computation

NOTE Confidence: 0.536093294

00:34:50.080 --> 00:34:52.400 is very helpful bar marker,

NOTE Confidence: 0.536093294

00:34:52.400 --> 00:34:55.165 it's negative for in all the denomination

NOTE Confidence: 0.536093294

00:34:55.165 --> 00:34:58.835 so far we have analysed and so it's good,

NOTE Confidence: 0.536093294

00:34:58.840 --> 00:35:01.248 it's great bar markers and so go back

NOTE Confidence: 0.536093294

00:35:01.248 --> 00:35:03.636 to the fair and it's logic fair.

NOTE Confidence: 0.536093294

00:35:03.640 --> 00:35:06.616 And one particular fair and I want to

NOTE Confidence: 0.536093294

00:35:06.616 --> 00:35:10.044 point out is the macro Papri your city

NOTE Confidence: 0.536093294

00:35:10.044 --> 00:35:12.807 customer of bladder Leslie Lee Shing.

NOTE Confidence: 0.536093294

00:35:12.807 --> 00:35:15.880 But Peter Humphrey has started 20 years ago,

NOTE Confidence: 0.536093294

00:35:15.880 --> 00:35:17.836 I guess you know published paper.

NOTE Confidence: 0.536093294

00:35:17.840 --> 00:35:20.200 I was I'm not sure if people don't

NOTE Confidence: 0.536093294

00:35:20.200 --> 00:35:22.604 think you remember it's a it's a

NOTE Confidence: 0.536093294

00:35:22.604 --> 00:35:24.760 it's one of the classic study that

NOTE Confidence: 0.536093294

00:35:24.760 --> 00:35:26.610 Peter Humphrey had published and
NOTE Confidence: 0.536093294

00:35:26.610 --> 00:35:29.600 and it was you know in terms of our
NOTE Confidence: 0.536093294

00:35:29.600 --> 00:35:31.256 understanding morphology not much
NOTE Confidence: 0.536093294

00:35:31.256 --> 00:35:34.000 there's not much change you know but
NOTE Confidence: 0.536093294

00:35:34.000 --> 00:35:37.320 it's really very aggressive friend
NOTE Confidence: 0.536093294

00:35:37.320 --> 00:35:39.192 one unique features could be in
NOTE Confidence: 0.536093294

00:35:39.192 --> 00:35:41.439 your board exam is that this tumor
NOTE Confidence: 0.536093294

00:35:41.439 --> 00:35:43.520 also have fair fair high preference
NOTE Confidence: 0.536093294

00:35:43.520 --> 00:35:47.760 of a her to you know mutation or
NOTE Confidence: 0.536093294

00:35:47.760 --> 00:35:50.505 her to you know old expression.
NOTE Confidence: 0.536093294

00:35:50.505 --> 00:35:53.760 This one fair few tumor in the that's really
NOTE Confidence: 0.536093294

00:35:53.760 --> 00:35:56.800 fair for her instance of her to expression.
NOTE Confidence: 0.59802818375

00:35:59.600 --> 00:36:02.100 Jessica Possible is our former
NOTE Confidence: 0.59802818375

00:36:02.100 --> 00:36:03.600 surgical prosology fellow.
NOTE Confidence: 0.59802818375

00:36:03.600 --> 00:36:06.360 He did the study last year.
NOTE Confidence: 0.59802818375

00:36:06.360 --> 00:36:11.876 Brown and we compared genome profiling of

NOTE Confidence: 0.67092395

00:36:14.560 --> 00:36:19.586 220 patients and all have the two mutations,

NOTE Confidence: 0.67092395

00:36:19.586 --> 00:36:23.780 11 will have the macro peppery morphology,

NOTE Confidence: 0.67092395

00:36:23.780 --> 00:36:27.073 one will not macro peppery morphology.

NOTE Confidence: 0.67092395

00:36:27.073 --> 00:36:30.217 What we keep the take home message is

NOTE Confidence: 0.67092395

00:36:30.217 --> 00:36:32.876 that you know this is just you know

NOTE Confidence: 0.67092395

00:36:32.880 --> 00:36:36.894 the KMT two RB One and TAB this key

NOTE Confidence: 0.67092395

00:36:36.894 --> 00:36:39.720 molecular driver for morphologic.

NOTE Confidence: 0.67092395

00:36:39.720 --> 00:36:42.240 So not when they really kind of

NOTE Confidence: 0.67092395

00:36:42.240 --> 00:36:43.320 morphological molecular correlation.

NOTE Confidence: 0.67092395

00:36:43.320 --> 00:36:45.588 So this is something we found

NOTE Confidence: 0.67092395

00:36:45.588 --> 00:36:47.839 in the study the KMT two,

NOTE Confidence: 0.67092395

00:36:47.840 --> 00:36:50.616 RB One and TAB the key molecular

NOTE Confidence: 0.67092395

00:36:50.616 --> 00:36:52.280 driver of this issue.

NOTE Confidence: 0.67092395

00:36:52.280 --> 00:36:56.040 All right. So let's

NOTE Confidence: 0.7804870425

00:36:58.840 --> 00:37:01.432 take a another quiz to see what you

NOTE Confidence: 0.7804870425

00:37:01.432 --> 00:37:04.920 have learned from this morning's
NOTE Confidence: 0.7804870425

00:37:04.920 --> 00:37:07.440 lecture or slide seminar. OK.
NOTE Confidence: 0.7804870425

00:37:07.440 --> 00:37:11.008 And let's pick up another resident. OK.
NOTE Confidence: 0.7804870425

00:37:11.008 --> 00:37:14.365 So this is a 65 years old man presented
NOTE Confidence: 0.7804870425

00:37:14.365 --> 00:37:16.802 with him two years, 3 centimeters,
NOTE Confidence: 0.7804870425

00:37:16.802 --> 00:37:20.490 3 centum mass and and also look at
NOTE Confidence: 0.7804870425

00:37:20.586 --> 00:37:23.880 three is positive and that's tumor.
NOTE Confidence: 0.7804870425

00:37:23.880 --> 00:37:27.080 So what's your diagnosis?
NOTE Confidence: 0.7804870425

00:37:27.080 --> 00:37:30.350 I mean, the senior resident who
NOTE Confidence: 0.7804870425

00:37:30.350 --> 00:37:34.518 have attended today's SLA seminar,
NOTE Confidence: 0.7804870425

00:37:34.520 --> 00:37:35.280 You want to What's your
NOTE Confidence: 0.678299562

00:37:37.400 --> 00:37:38.600 diagnosis? What diagnosis? You said
NOTE Confidence: 0.317719718

00:37:48.200 --> 00:37:49.800 that paragraph was 3 positive.
NOTE Confidence: 0.24323548

00:37:53.360 --> 00:37:53.440 So
NOTE Confidence: 0.534825982

00:37:58.840 --> 00:38:03.388 exactly let's let's let's let you know.
NOTE Confidence: 0.534825982

00:38:03.388 --> 00:38:05.958 Let's let bladder para gangloma,

NOTE Confidence: 0.534825982

00:38:05.960 --> 00:38:09.020 you know this is a leaching that right you

NOTE Confidence: 0.534825982

00:38:09.020 --> 00:38:11.904 know have a fair peculiar you know that

NOTE Confidence: 0.534825982

00:38:11.904 --> 00:38:14.400 you know they have anthropilic cytoplasm,

NOTE Confidence: 0.534825982

00:38:14.400 --> 00:38:17.151 they have a very vascular structure but

NOTE Confidence: 0.534825982

00:38:17.151 --> 00:38:19.648 there's also could be you know they're

NOTE Confidence: 0.534825982

00:38:19.648 --> 00:38:21.940 all get the street positive so so

NOTE Confidence: 0.534825982

00:38:21.940 --> 00:38:24.199 that's that's good very unusual tumor.

NOTE Confidence: 0.534825982

00:38:24.200 --> 00:38:27.008 So you have to keep in mind wide

NOTE Confidence: 0.534825982

00:38:27.008 --> 00:38:28.712 open differential diagnosis.

NOTE Confidence: 0.534825982

00:38:28.712 --> 00:38:31.480 Yeah, paragraph Gangloma is a fair,

NOTE Confidence: 0.534825982

00:38:31.480 --> 00:38:34.290 fair you know kind of a rare tumor that

NOTE Confidence: 0.534825982

00:38:34.290 --> 00:38:37.526 you know this is the prognosis wise you

NOTE Confidence: 0.534825982

00:38:37.526 --> 00:38:40.522 know that's the pathologic stage is only

NOTE Confidence: 0.534825982

00:38:40.522 --> 00:38:43.598 saying that can predict patient outcome.

NOTE Confidence: 0.534825982

00:38:43.600 --> 00:38:47.613 So in terms of the in terms of the neural

NOTE Confidence: 0.534825982

00:38:47.613 --> 00:38:49.425 endocrine tumor and classification
NOTE Confidence: 0.534825982

00:38:49.425 --> 00:38:52.360 in for bladder this remain the same.
NOTE Confidence: 0.534825982

00:38:52.360 --> 00:38:54.440 Now it says with more,
NOTE Confidence: 0.534825982

00:38:54.440 --> 00:38:56.680 more or less mirror what's we're seeing in
NOTE Confidence: 0.534825982

00:38:56.680 --> 00:38:59.358 the in the lung with small cell carcinomer,
NOTE Confidence: 0.534825982

00:38:59.360 --> 00:39:01.320 large cell neuronic customer word,
NOTE Confidence: 0.534825982

00:39:01.320 --> 00:39:03.260 the French neuronic customer
NOTE Confidence: 0.534825982

00:39:03.260 --> 00:39:04.715 and the perigangioma.
NOTE Confidence: 0.534825982

00:39:04.720 --> 00:39:07.093 But the small set customer is probably
NOTE Confidence: 0.534825982

00:39:07.093 --> 00:39:09.438 not really it's a terrible terrible,
NOTE Confidence: 0.534825982

00:39:09.440 --> 00:39:11.459 this terrible disease.
NOTE Confidence: 0.534825982

00:39:11.459 --> 00:39:13.478 The prognosis is,
NOTE Confidence: 0.534825982

00:39:13.480 --> 00:39:17.324 is is one of the worst five years
NOTE Confidence: 0.534825982

00:39:17.324 --> 00:39:20.278 above or 10 years above it's almost
NOTE Confidence: 0.534825982

00:39:20.278 --> 00:39:24.335 zero and and the multi modality mostly
NOTE Confidence: 0.534825982

00:39:24.335 --> 00:39:26.312 including actrophone chemotherapy

NOTE Confidence: 0.534825982

00:39:26.312 --> 00:39:30.217 is the key is all for the best

NOTE Confidence: 0.534825982

00:39:30.217 --> 00:39:32.226 hope for the patient chair.

NOTE Confidence: 0.534825982

00:39:32.226 --> 00:39:32.572 So,

NOTE Confidence: 0.534825982

00:39:32.572 --> 00:39:35.360 so that's the you know kind of it's

NOTE Confidence: 0.534825982

00:39:35.360 --> 00:39:37.880 fair you know kind of bad disease

NOTE Confidence: 0.534825982

00:39:37.880 --> 00:39:39.920 and in terms of the pathogenesis

NOTE Confidence: 0.534825982

00:39:39.920 --> 00:39:42.337 you know so one of the questions

NOTE Confidence: 0.534825982

00:39:42.337 --> 00:39:44.969 we have is that you know a small

NOTE Confidence: 0.534825982

00:39:45.045 --> 00:39:47.074 cell carcinomer colonial related

NOTE Confidence: 0.534825982

00:39:47.074 --> 00:39:49.936 to Eurociliac carcinoma or not are

NOTE Confidence: 0.534825982

00:39:49.936 --> 00:39:52.137 they independent you know separate

NOTE Confidence: 0.534825982

00:39:52.137 --> 00:39:54.477 from some new land Chrome cells.

NOTE Confidence: 0.534825982

00:39:54.480 --> 00:39:57.953 And in the study we found that and

NOTE Confidence: 0.534825982

00:39:57.953 --> 00:39:59.808 are using Modic genetic F approach,

NOTE Confidence: 0.534825982

00:39:59.808 --> 00:40:01.536 we found both your Cilic customer

NOTE Confidence: 0.534825982

00:40:01.536 --> 00:40:03.399 and small cell customer component.
NOTE Confidence: 0.534825982

00:40:03.400 --> 00:40:06.208 They are originally from same stem
NOTE Confidence: 0.534825982

00:40:06.208 --> 00:40:08.680 cells in the uricilium and now
NOTE Confidence: 0.534825982

00:40:08.680 --> 00:40:10.680 we have to promote mutation.
NOTE Confidence: 0.534825982

00:40:10.680 --> 00:40:13.956 So we also analyzing could promote
NOTE Confidence: 0.534825982

00:40:13.956 --> 00:40:17.534 mutation in both small cell customer
NOTE Confidence: 0.534825982

00:40:17.534 --> 00:40:21.428 and coexisting your customer and also
NOTE Confidence: 0.534825982

00:40:21.428 --> 00:40:24.192 analyzing control 26 patients with
NOTE Confidence: 0.534825982

00:40:24.192 --> 00:40:26.832 a prosthetic small cell customer.
NOTE Confidence: 0.534825982

00:40:26.840 --> 00:40:29.787 What we found it's not surprisingly the
NOTE Confidence: 0.534825982

00:40:29.787 --> 00:40:32.640 Kurd mutation is also very prevalent.
NOTE Confidence: 0.534825982

00:40:32.640 --> 00:40:34.656 It's present more than half of
NOTE Confidence: 0.534825982

00:40:34.656 --> 00:40:37.050 that is small set customer and
NOTE Confidence: 0.534825982

00:40:37.050 --> 00:40:39.276 interestingly you know it's negative.
NOTE Confidence: 0.534825982

00:40:39.276 --> 00:40:41.922 We don't see any function Kurd permutation
NOTE Confidence: 0.534825982

00:40:41.922 --> 00:40:44.518 in blood prospect small set customer.

NOTE Confidence: 0.534825982

00:40:44.520 --> 00:40:47.495 So indeed I was thinking now that

NOTE Confidence: 0.534825982

00:40:47.495 --> 00:40:50.832 despite the morphological you know

NOTE Confidence: 0.534825982

00:40:50.832 --> 00:40:53.405 similarity this underlying pathogenesis

NOTE Confidence: 0.534825982

00:40:53.405 --> 00:40:57.168 you know so quite different and this

NOTE Confidence: 0.534825982

00:40:57.168 --> 00:40:58.888 paper publishing the clinical Cancer

NOTE Confidence: 0.534825982

00:40:58.888 --> 00:41:00.916 Research and you know so this is a

NOTE Confidence: 0.534825982

00:41:00.920 --> 00:41:04.385 you know all the small cell customer

NOTE Confidence: 0.534825982

00:41:04.385 --> 00:41:07.232 regardless human origin they always

NOTE Confidence: 0.534825982

00:41:07.232 --> 00:41:09.724 share similar molecular funding that

NOTE Confidence: 0.534825982

00:41:09.724 --> 00:41:12.620 is RB one loss TPC loss and but

NOTE Confidence: 0.534825982

00:41:12.711 --> 00:41:15.676 individually they may have different

NOTE Confidence: 0.466997458181818

00:41:18.080 --> 00:41:20.370 you know there's underlying bladder

NOTE Confidence: 0.466997458181818

00:41:20.370 --> 00:41:23.984 you will see stood promote mutations so

NOTE Confidence: 0.466997458181818

00:41:23.984 --> 00:41:29.360 that's the one and but OK so so let's

NOTE Confidence: 0.466997458181818

00:41:29.360 --> 00:41:33.518 switch gear talk about some more exciting

NOTE Confidence: 0.466997458181818

00:41:33.518 --> 00:41:37.142 things and what's the what's happening

NOTE Confidence: 0.466997458181818

00:41:37.142 --> 00:41:40.480 outside of college and so this is

NOTE Confidence: 0.580357903333333

00:41:42.520 --> 00:41:45.102 this table this came from our paper

NOTE Confidence: 0.580357903333333

00:41:45.102 --> 00:41:47.776 it's going to be published in the

NOTE Confidence: 0.580357903333333

00:41:47.776 --> 00:41:51.355 BMG soon and also so what's the.

NOTE Confidence: 0.580357903333333

00:41:51.355 --> 00:41:54.400 I think this is truly exciting that

NOTE Confidence: 0.580357903333333

00:41:54.400 --> 00:41:57.632 convergence of molecular physician

NOTE Confidence: 0.580357903333333

00:41:57.632 --> 00:41:59.870 medicine college and the and the

NOTE Confidence: 0.580357903333333

00:41:59.870 --> 00:42:01.759 genomics you know that's a tumor

NOTE Confidence: 0.580357903333333

00:42:01.759 --> 00:42:04.129 classification you know it's a very

NOTE Confidence: 0.580357903333333

00:42:04.129 --> 00:42:05.715 robust tumor classification system

NOTE Confidence: 0.580357903333333

00:42:05.715 --> 00:42:07.743 has been proposed they are most

NOTE Confidence: 0.580357903333333

00:42:07.743 --> 00:42:09.960 importantly it's not just simple you

NOTE Confidence: 0.580357903333333

00:42:09.960 --> 00:42:12.360 know luminal basal luminal that link

NOTE Confidence: 0.580357903333333

00:42:12.360 --> 00:42:15.716 to the patient prognosis and also where

NOTE Confidence: 0.580357903333333

00:42:15.716 --> 00:42:18.250 the patient patient treatment we have

NOTE Confidence: 0.580357903333333

00:42:18.250 --> 00:42:21.388 to go back ten years ago you know this

NOTE Confidence: 0.580357903333333

00:42:21.388 --> 00:42:24.440 paper was published in JCO and then

NOTE Confidence: 0.580357903333333

00:42:24.440 --> 00:42:26.568 my friend doctor Nohan he's now Johns

NOTE Confidence: 0.580357903333333

00:42:26.568 --> 00:42:28.971 Hopkin and he's one of the brilliant

NOTE Confidence: 0.580357903333333

00:42:28.971 --> 00:42:30.756 oncologists in this clinical trial.

NOTE Confidence: 0.580357903333333

00:42:30.760 --> 00:42:31.454 He cannot.

NOTE Confidence: 0.580357903333333

00:42:31.454 --> 00:42:33.883 You know this is a patient with

NOTE Confidence: 0.580357903333333

00:42:33.883 --> 00:42:35.502 advanced stage bladder cancer.

NOTE Confidence: 0.580357903333333

00:42:35.502 --> 00:42:38.519 You know overall survival is less than

NOTE Confidence: 0.580357903333333

00:42:38.519 --> 00:42:40.876 two years really it's kind of bad cancer.

NOTE Confidence: 0.580357903333333

00:42:40.880 --> 00:42:44.877 So back until you know 2011 this,

NOTE Confidence: 0.580357903333333

00:42:44.880 --> 00:42:48.445 this is still but you know Elizabeth

NOTE Confidence: 0.580357903333333

00:42:48.445 --> 00:42:50.901 review paper pubs in the 2017

NOTE Confidence: 0.580357903333333

00:42:50.901 --> 00:42:53.949 whether we can see I want to draw

NOTE Confidence: 0.580357903333333

00:42:53.949 --> 00:42:56.399 attention to the bladder what those

NOTE Confidence: 0.580357903333333

00:42:56.400 --> 00:43:01.080 .0 means that means back in the 2017
NOTE Confidence: 0.5803579033333333

00:43:01.080 --> 00:43:03.444 this is no FDA approved standard
NOTE Confidence: 0.5803579033333333

00:43:03.444 --> 00:43:06.238 care for bladder and also very few
NOTE Confidence: 0.5803579033333333

00:43:06.238 --> 00:43:08.518 would be in the clinical trials.
NOTE Confidence: 0.5803579033333333

00:43:08.520 --> 00:43:11.346 But that has changed two years
NOTE Confidence: 0.5803579033333333

00:43:11.346 --> 00:43:14.976 later in the 2019 finally finally we
NOTE Confidence: 0.5803579033333333

00:43:14.976 --> 00:43:18.300 have this first FDA approved target
NOTE Confidence: 0.5803579033333333

00:43:18.396 --> 00:43:21.834 therapy for for bladder cancer that's
NOTE Confidence: 0.5803579033333333

00:43:21.834 --> 00:43:25.160 targeting FG last three mutations.
NOTE Confidence: 0.5803579033333333

00:43:25.160 --> 00:43:27.960 And in the same year you know FDA
NOTE Confidence: 0.5803579033333333

00:43:27.960 --> 00:43:29.876 also approved carding companion
NOTE Confidence: 0.5803579033333333

00:43:29.876 --> 00:43:33.520 diagnosis for bladder cancer as a
NOTE Confidence: 0.5803579033333333

00:43:33.520 --> 00:43:37.040 single as a Johnson Jensen drug.
NOTE Confidence: 0.5803579033333333

00:43:37.040 --> 00:43:39.640 And so this is a,
NOTE Confidence: 0.5803579033333333

00:43:39.640 --> 00:43:43.180 this paper I was you know kind of
NOTE Confidence: 0.5803579033333333

00:43:43.180 --> 00:43:45.640 first announcing SQ meeting that in

NOTE Confidence: 0.5803579033333333

00:43:45.640 --> 00:43:49.624 2019 is the paper was published in

NOTE Confidence: 0.5803579033333333

00:43:49.624 --> 00:43:53.056 the medicine you see that's truly

NOTE Confidence: 0.5803579033333333

00:43:53.056 --> 00:43:55.056 phenomenal significant objective tumor

NOTE Confidence: 0.5803579033333333

00:43:55.056 --> 00:43:57.624 response more than half patient you

NOTE Confidence: 0.5803579033333333

00:43:57.624 --> 00:44:01.020 will see you know almost immediately too

NOTE Confidence: 0.5803579033333333

00:44:01.020 --> 00:44:03.736 much shrunk and truly it's remarkable.

NOTE Confidence: 0.5803579033333333

00:44:03.736 --> 00:44:05.240 Well, you know the question is that,

NOTE Confidence: 0.5803579033333333

00:44:05.240 --> 00:44:07.664 well what that means tumor progression

NOTE Confidence: 0.5803579033333333

00:44:07.664 --> 00:44:10.444 and all those things, what that means?

NOTE Confidence: 0.5803579033333333

00:44:10.444 --> 00:44:11.996 How about patient survival,

NOTE Confidence: 0.5803579033333333

00:44:12.000 --> 00:44:12.504 you know,

NOTE Confidence: 0.5803579033333333

00:44:12.504 --> 00:44:13.764 do they have integral patients

NOTE Confidence: 0.5803579033333333

00:44:13.764 --> 00:44:15.254 About the last question we always

NOTE Confidence: 0.5803579033333333

00:44:15.254 --> 00:44:16.857 have from the target set up all

NOTE Confidence: 0.5803579033333333

00:44:16.905 --> 00:44:18.277 the data previously published,

NOTE Confidence: 0.70471455

00:44:20.520 --> 00:44:21.660 you know, yeah, it's sure
NOTE Confidence: 0.70471455

00:44:21.660 --> 00:44:22.800 they can improve the patient,
NOTE Confidence: 0.70471455

00:44:22.800 --> 00:44:24.584 but how about survival?
NOTE Confidence: 0.70471455

00:44:24.584 --> 00:44:27.710 This data this paper just published last
NOTE Confidence: 0.70471455

00:44:27.710 --> 00:44:30.120 month in the New England General just
NOTE Confidence: 0.70471455

00:44:30.120 --> 00:44:32.080 three weeks ago in New England German,
NOTE Confidence: 0.70471455

00:44:32.080 --> 00:44:34.848 let's say, you know you can see here
NOTE Confidence: 0.70471455

00:44:34.848 --> 00:44:37.096 that true data FGF three treatment
NOTE Confidence: 0.70471455

00:44:37.096 --> 00:44:38.760 inhibitor make a difference.
NOTE Confidence: 0.70471455

00:44:38.760 --> 00:44:40.200 This is the line you know,
NOTE Confidence: 0.70471455

00:44:40.200 --> 00:44:42.060 you know the patient was treated
NOTE Confidence: 0.70471455

00:44:42.060 --> 00:44:45.005 with it FGS 3 inhibitor that also
NOTE Confidence: 0.70471455

00:44:45.005 --> 00:44:47.915 valves four months almost double the
NOTE Confidence: 0.70471455

00:44:47.915 --> 00:44:50.400 patient without target therapy someone
NOTE Confidence: 0.70471455

00:44:50.400 --> 00:44:53.440 with E mouse that's substantial.
NOTE Confidence: 0.70471455

00:44:53.440 --> 00:44:55.372 This is really a major breakthrough

NOTE Confidence: 0.70471455

00:44:55.372 --> 00:44:57.400 for the black cat square yet.

NOTE Confidence: 0.70471455

00:44:57.400 --> 00:45:00.000 So this is kind of a lack kind of results,

NOTE Confidence: 0.70471455

00:45:00.000 --> 00:45:01.986 you know it's almost like a

NOTE Confidence: 0.70471455

00:45:01.986 --> 00:45:03.310 mandatory all the black cat patients

NOTE Confidence: 0.70471455

00:45:03.310 --> 00:45:04.520 you want to try it out,

NOTE Confidence: 0.70471455

00:45:04.520 --> 00:45:06.815 you need to do the test you know to

NOTE Confidence: 0.70471455

00:45:06.815 --> 00:45:09.332 see you don't want to miss opportunity

NOTE Confidence: 0.70471455

00:45:09.332 --> 00:45:11.387 for patient to extend patients

NOTE Confidence: 0.70471455

00:45:11.387 --> 00:45:13.479 life that's really exponential.

NOTE Confidence: 0.70471455

00:45:13.480 --> 00:45:18.940 So we liquid biopsy is also another

NOTE Confidence: 0.70471455

00:45:18.940 --> 00:45:21.080 important value interesting you know

NOTE Confidence: 0.70471455

00:45:21.080 --> 00:45:23.454 that you know basically more more more

NOTE Confidence: 0.70471455

00:45:23.454 --> 00:45:25.393 important as in the bladder not just

NOTE Confidence: 0.70471455

00:45:25.393 --> 00:45:27.540 in this you can do the liquid biopsy

NOTE Confidence: 0.70471455

00:45:27.540 --> 00:45:29.800 in the serum but also in the urine.

NOTE Confidence: 0.70471455

00:45:29.800 --> 00:45:32.096 You can test the FGSE in
NOTE Confidence: 0.70471455

00:45:32.096 --> 00:45:34.406 the urine specimen as well.
NOTE Confidence: 0.70471455

00:45:34.406 --> 00:45:36.584 And these people are pushing the
NOTE Confidence: 0.70471455

00:45:36.584 --> 00:45:38.312 journal clinic on college and
NOTE Confidence: 0.70471455

00:45:38.312 --> 00:45:40.489 they found that you know that the
NOTE Confidence: 0.70471455

00:45:40.559 --> 00:45:42.603 presence of cell free DNA in the
NOTE Confidence: 0.70471455

00:45:42.603 --> 00:45:44.362 blood and in patient related you
NOTE Confidence: 0.70471455

00:45:44.362 --> 00:45:46.420 know C Class number you know can
NOTE Confidence: 0.70471455

00:45:46.483 --> 00:45:48.520 predict patient survival.
NOTE Confidence: 0.70471455

00:45:48.520 --> 00:45:50.600 So that's kind of a,
NOTE Confidence: 0.70471455

00:45:50.600 --> 00:45:51.200 it's not
NOTE Confidence: 0.76427382

00:45:53.360 --> 00:45:55.352 surprising you know when you have
NOTE Confidence: 0.76427382

00:45:55.352 --> 00:45:57.359 more tumor shut into the blood,
NOTE Confidence: 0.76427382

00:45:57.360 --> 00:45:59.196 those patients probably have high tumor,
NOTE Confidence: 0.76427382

00:45:59.200 --> 00:46:01.840 low high tumor burden.
NOTE Confidence: 0.76427382

00:46:01.840 --> 00:46:04.480 And there's another paper

NOTE Confidence: 0.76427382
00:46:04.480 --> 00:46:07.120 landmarks paper published in
NOTE Confidence: 0.76427382
00:46:07.120 --> 00:46:09.560 Nature and the Fairfield papers.
NOTE Confidence: 0.76427382
00:46:09.560 --> 00:46:11.678 This all will lending to this
NOTE Confidence: 0.76427382
00:46:11.678 --> 00:46:13.730 kind of clinical people will land
NOTE Confidence: 0.76427382
00:46:13.730 --> 00:46:15.958 in nature and to see the key,
NOTE Confidence: 0.76427382
00:46:15.958 --> 00:46:18.352 the key message the foundings that
NOTE Confidence: 0.76427382
00:46:18.352 --> 00:46:21.320 you know this is for a different PD1
NOTE Confidence: 0.543887347
00:46:23.400 --> 00:46:25.056 media media immunotherapy.
NOTE Confidence: 0.543887347
00:46:25.056 --> 00:46:28.368 The patient if you use for
NOTE Confidence: 0.543887347
00:46:28.368 --> 00:46:31.760 your serum, you know if you're
NOTE Confidence: 0.418198975
00:46:35.760 --> 00:46:36.560 liquid biopsy
NOTE Confidence: 0.72028064375
00:46:38.920 --> 00:46:43.270 negative for free plasma DNA and
NOTE Confidence: 0.72028064375
00:46:43.270 --> 00:46:45.920 the chemo atriphant chemo therapy
NOTE Confidence: 0.72028064375
00:46:45.920 --> 00:46:47.520 doesn't make much difference
NOTE Confidence: 0.72028064375
00:46:47.520 --> 00:46:49.879 that will not make a difference.
NOTE Confidence: 0.72028064375

00:46:49.880 --> 00:46:56.100 In contrast, in contrast the patient the,
NOTE Confidence: 0.72028064375

00:46:56.100 --> 00:46:58.900 the atriphant immunotherapy only
NOTE Confidence: 0.72028064375

00:46:58.900 --> 00:47:02.180 matters when the patient have positive
NOTE Confidence: 0.72028064375

00:47:02.180 --> 00:47:04.760 similar mark of positive CFDMA.
NOTE Confidence: 0.72028064375

00:47:04.760 --> 00:47:07.196 So, so that's really kind of changing
NOTE Confidence: 0.72028064375

00:47:07.196 --> 00:47:09.106 I think about you know nowadays
NOTE Confidence: 0.72028064375

00:47:09.106 --> 00:47:11.157 we always say we know there's a
NOTE Confidence: 0.72028064375

00:47:11.160 --> 00:47:13.170 treatment a fair very expensive you
NOTE Confidence: 0.72028064375

00:47:13.170 --> 00:47:15.239 don't know which patient may benefit.
NOTE Confidence: 0.72028064375

00:47:15.240 --> 00:47:18.905 PDL one is fantastic spa market,
NOTE Confidence: 0.72028064375

00:47:18.905 --> 00:47:21.446 it's good you know Johnson that has
NOTE Confidence: 0.72028064375

00:47:21.446 --> 00:47:23.476 been pioneering analyzing all this
NOTE Confidence: 0.72028064375

00:47:23.476 --> 00:47:26.500 spa mark and this is so but you know
NOTE Confidence: 0.72028064375

00:47:26.500 --> 00:47:28.270 it's especially in the blood that
NOTE Confidence: 0.72028064375

00:47:28.336 --> 00:47:30.322 we all were already removed that
NOTE Confidence: 0.72028064375

00:47:30.322 --> 00:47:32.508 indication you used to be like using

NOTE Confidence: 0.72028064375

00:47:32.508 --> 00:47:34.900 you know 10% cut off in FDA indication

NOTE Confidence: 0.72028064375

00:47:34.900 --> 00:47:37.235 that label has been removed for two

NOTE Confidence: 0.72028064375

00:47:37.235 --> 00:47:38.800 years maybe I think two years ago.

NOTE Confidence: 0.72028064375

00:47:38.800 --> 00:47:40.832 So we're not we're not using PDL one

NOTE Confidence: 0.72028064375

00:47:40.832 --> 00:47:42.259 understanding to God you know that's

NOTE Confidence: 0.72028064375

00:47:42.259 --> 00:47:43.912 so really this is kind of interesting

NOTE Confidence: 0.72028064375

00:47:43.912 --> 00:47:45.754 study that showing you that another

NOTE Confidence: 0.72028064375

00:47:45.754 --> 00:47:47.852 patient you know that's a you really

NOTE Confidence: 0.72028064375

00:47:47.852 --> 00:47:50.324 need to kind of more more importantly

NOTE Confidence: 0.72028064375

00:47:50.324 --> 00:47:54.340 you can see here the impact will also

NOTE Confidence: 0.72028064375

00:47:54.441 --> 00:47:56.575 baffle 25 months versus 15 months

NOTE Confidence: 0.72028064375

00:47:56.575 --> 00:47:58.443 that's fast especially so really I

NOTE Confidence: 0.72028064375

00:47:58.443 --> 00:48:00.088 think the the calling for you know

NOTE Confidence: 0.72028064375

00:48:00.088 --> 00:48:05.506 the the the CLM DNA test the next

NOTE Confidence: 0.72028064375

00:48:05.506 --> 00:48:08.104 frontier I think small exciting things

NOTE Confidence: 0.72028064375

00:48:08.104 --> 00:48:10.846 really the the Spatial Transcriminate
NOTE Confidence: 0.72028064375

00:48:10.846 --> 00:48:13.725 transcriminate study and what what's
NOTE Confidence: 0.72028064375

00:48:13.725 --> 00:48:16.635 the underlying mechanism for you know
NOTE Confidence: 0.72028064375

00:48:16.635 --> 00:48:19.425 to overcome you know immunotherapy
NOTE Confidence: 0.72028064375

00:48:19.425 --> 00:48:21.648 tumor resist immunocellular resistance
NOTE Confidence: 0.72028064375

00:48:21.648 --> 00:48:25.036 and it's emerging field and I'm very
NOTE Confidence: 0.718279204444445

00:48:28.040 --> 00:48:30.116 honoured privilege to be able to
NOTE Confidence: 0.718279204444445

00:48:30.116 --> 00:48:32.759 participate in in this study there was
NOTE Confidence: 0.718279204444445

00:48:32.759 --> 00:48:34.744 a publishing that cancer communication
NOTE Confidence: 0.718279204444445

00:48:34.744 --> 00:48:37.383 last two months ago and then we found
NOTE Confidence: 0.718279204444445

00:48:37.383 --> 00:48:40.134 that you know that you know that's
NOTE Confidence: 0.718279204444445

00:48:40.134 --> 00:48:42.292 crucially linked for structure and it's
NOTE Confidence: 0.718279204444445

00:48:42.292 --> 00:48:44.878 a bar marker you know that's associated
NOTE Confidence: 0.718279204444445

00:48:44.880 --> 00:48:49.731 linked to the the PDL 1 inhibitor
NOTE Confidence: 0.718279204444445

00:48:49.731 --> 00:48:51.467 immunotherapy affect resistance.
NOTE Confidence: 0.718279204444445

00:48:51.467 --> 00:48:54.243 And the key message here is that you

NOTE Confidence: 0.718279204444445
00:48:54.243 --> 00:48:58.200 know for the patient if you have those
NOTE Confidence: 0.718279204444445
00:48:58.200 --> 00:49:00.904 neutrophil in MYLOD derived suppressor
NOTE Confidence: 0.718279204444445
00:49:00.904 --> 00:49:03.256 cells you know those patients can
NOTE Confidence: 0.718279204444445
00:49:03.256 --> 00:49:05.678 do have a much better prognosis.
NOTE Confidence: 0.718279204444445
00:49:05.680 --> 00:49:09.336 So this line here if you have a
NOTE Confidence: 0.718279204444445
00:49:09.336 --> 00:49:12.800 positive MDSC and they doing much
NOTE Confidence: 0.718279204444445
00:49:12.800 --> 00:49:16.084 better than patient a lot with cells.
NOTE Confidence: 0.718279204444445
00:49:16.084 --> 00:49:19.240 So so the question is that how to tuning,
NOTE Confidence: 0.718279204444445
00:49:19.240 --> 00:49:20.176 how to train,
NOTE Confidence: 0.718279204444445
00:49:20.176 --> 00:49:23.170 how to select patient also how to convert
NOTE Confidence: 0.718279204444445
00:49:23.170 --> 00:49:26.238 those you know the code tumor to hot tumor.
NOTE Confidence: 0.718279204444445
00:49:26.240 --> 00:49:28.676 So that's really kind of interesting
NOTE Confidence: 0.718279204444445
00:49:28.680 --> 00:49:32.176 and I would like to you know ending my
NOTE Confidence: 0.718279204444445
00:49:32.176 --> 00:49:34.892 talk with this paper view paper just
NOTE Confidence: 0.718279204444445
00:49:34.892 --> 00:49:38.532 published in Nature Medicine about
NOTE Confidence: 0.718279204444445

00:49:38.532 --> 00:49:42.024 Sudan who's a fantastic amazing you
NOTE Confidence: 0.718279204444445

00:49:42.024 --> 00:49:44.354 know oncologist who's leading many,
NOTE Confidence: 0.718279204444445

00:49:44.360 --> 00:49:47.664 many clinical trials and this is we
NOTE Confidence: 0.718279204444445

00:49:47.664 --> 00:49:50.986 are in the next phase of physician
NOTE Confidence: 0.718279204444445

00:49:50.986 --> 00:49:53.782 medicine on college and as we
NOTE Confidence: 0.718279204444445

00:49:53.782 --> 00:49:57.537 are seeing the verge of all the
NOTE Confidence: 0.718279204444445

00:49:57.537 --> 00:49:59.696 different technology platform AI,
NOTE Confidence: 0.718279204444445

00:49:59.696 --> 00:50:02.432 trans clinic liquid biopsy genomic you
NOTE Confidence: 0.718279204444445

00:50:02.432 --> 00:50:06.320 know let's see the bar marker is already
NOTE Confidence: 0.718279204444445

00:50:06.320 --> 00:50:08.760 entrenched in our current practice.
NOTE Confidence: 0.718279204444445

00:50:08.760 --> 00:50:10.808 It's it's, it's fair.
NOTE Confidence: 0.718279204444445

00:50:10.808 --> 00:50:11.656 It's profusing.
NOTE Confidence: 0.718279204444445

00:50:11.656 --> 00:50:13.336 It's everywhere not so nowadays
NOTE Confidence: 0.718279204444445

00:50:13.336 --> 00:50:15.564 We're now in the next phase you
NOTE Confidence: 0.718279204444445

00:50:15.564 --> 00:50:17.475 know that how to integrate in our
NOTE Confidence: 0.718279204444445

00:50:17.541 --> 00:50:18.953 informatics integrate all this

NOTE Confidence: 0.718279204444445

00:50:18.953 --> 00:50:21.071 information and so so this will

NOTE Confidence: 0.718279204444445

00:50:21.080 --> 00:50:23.592 be integrate approach regardless.

NOTE Confidence: 0.718279204444445

00:50:23.592 --> 00:50:26.456 You know that's you know you don't

NOTE Confidence: 0.718279204444445

00:50:26.456 --> 00:50:27.920 want enough when you come back

NOTE Confidence: 0.718279204444445

00:50:27.920 --> 00:50:30.040 to you among you I think it's a,

NOTE Confidence: 0.718279204444445

00:50:30.040 --> 00:50:32.005 you know morphology still remain

NOTE Confidence: 0.718279204444445

00:50:32.005 --> 00:50:34.816 that you know the cornerstone and and

NOTE Confidence: 0.718279204444445

00:50:34.816 --> 00:50:36.888 actually you know you have seen you

NOTE Confidence: 0.718279204444445

00:50:36.888 --> 00:50:40.024 start from you know 10 you have to

NOTE Confidence: 0.718279204444445

00:50:40.024 --> 00:50:43.072 absolutely morphology and and here

NOTE Confidence: 0.718279204444445

00:50:43.072 --> 00:50:47.528 also I just want this paper we also

NOTE Confidence: 0.718279204444445

00:50:47.528 --> 00:50:50.828 just published this month about two

NOTE Confidence: 0.718279204444445

00:50:50.828 --> 00:50:53.600 weeks ago and and this is a book I

NOTE Confidence: 0.718279204444445

00:50:53.690 --> 00:50:56.666 will recommend that just you know

NOTE Confidence: 0.718279204444445

00:50:56.666 --> 00:50:59.480 covering every single open system

NOTE Confidence: 0.718279204444445

00:50:59.480 --> 00:51:04.008 and so all right so stop my talk here
NOTE Confidence: 0.718279204444445

00:51:04.008 --> 00:51:05.880 leave for some time for questioning.
NOTE Confidence: 0.6136499475

00:51:18.760 --> 00:51:19.440 No that was great.
NOTE Confidence: 0.708574986

00:51:21.800 --> 00:51:25.450 So what do you see as far as some of
NOTE Confidence: 0.708574986

00:51:25.450 --> 00:51:31.740 the first case utility uses of AI. Yeah.
NOTE Confidence: 0.708574986

00:51:31.740 --> 00:51:35.541 Also in terms of AGU in the West we heard
NOTE Confidence: 0.708574986

00:51:35.541 --> 00:51:38.638 so much everything you know on the bladder,
NOTE Confidence: 0.708574986

00:51:38.640 --> 00:51:40.424 weeding, all those things.
NOTE Confidence: 0.708574986

00:51:40.424 --> 00:51:43.364 I was, I was trying to put some good
NOTE Confidence: 0.708574986

00:51:43.364 --> 00:51:45.278 slides for this talk in the AI.
NOTE Confidence: 0.708574986

00:51:45.280 --> 00:51:47.614 The only significant paper I have
NOTE Confidence: 0.708574986

00:51:47.614 --> 00:51:50.392 found that was a is a publishing
NOTE Confidence: 0.708574986

00:51:50.392 --> 00:51:52.678 The Lancet on college using AI
NOTE Confidence: 0.708574986

00:51:52.678 --> 00:51:55.317 to predict you know metastasis.
NOTE Confidence: 0.708574986

00:51:55.320 --> 00:51:57.426 So so in that regard and also try to
NOTE Confidence: 0.708574986

00:51:57.426 --> 00:51:59.755 look in some good paper I'm thinking oh

NOTE Confidence: 0.708574986

00:51:59.755 --> 00:52:02.143 breeding must be you know I'm sure you

NOTE Confidence: 0.708574986

00:52:02.143 --> 00:52:04.158 are probably doing that stuff as well.

NOTE Confidence: 0.708574986

00:52:04.158 --> 00:52:05.832 I'm not doing that complex study

NOTE Confidence: 0.708574986

00:52:05.832 --> 00:52:07.485 not breeding or BLAD how to use

NOTE Confidence: 0.708574986

00:52:07.485 --> 00:52:09.040 to train a art better breeding.

NOTE Confidence: 0.708574986

00:52:09.040 --> 00:52:13.090 So there's one paper publishing American

NOTE Confidence: 0.708574986

00:52:13.090 --> 00:52:16.740 Journal Pathology 4-5 years ago that was

NOTE Confidence: 0.708574986

00:52:16.740 --> 00:52:19.600 using AR acquisition to predict the breeding.

NOTE Confidence: 0.708574986

00:52:19.600 --> 00:52:22.111 You know that but in terms of like you

NOTE Confidence: 0.708574986

00:52:22.111 --> 00:52:24.479 know BLAD is such thing that we are,

NOTE Confidence: 0.708574986

00:52:24.480 --> 00:52:25.760 you know, Gu is,

NOTE Confidence: 0.708574986

00:52:25.760 --> 00:52:27.732 you know well behind breast,

NOTE Confidence: 0.708574986

00:52:27.732 --> 00:52:30.396 lung and in terms of bladder,

NOTE Confidence: 0.708574986

00:52:30.400 --> 00:52:32.956 we'll even feel a bit high.

NOTE Confidence: 0.708574986

00:52:32.960 --> 00:52:35.912 So AI comes come to the AI in the

NOTE Confidence: 0.708574986

00:52:35.912 --> 00:52:38.912 bladder and this is some few scattered
NOTE Confidence: 0.708574986

00:52:38.912 --> 00:52:41.872 study talking about you know you know
NOTE Confidence: 0.708574986

00:52:41.872 --> 00:52:44.368 talking about you know predicting or
NOTE Confidence: 0.708574986

00:52:44.368 --> 00:52:46.412 training more from your knowledge you
NOTE Confidence: 0.708574986

00:52:46.412 --> 00:52:48.400 know surgeon or on college point if
NOTE Confidence: 0.708574986

00:52:48.461 --> 00:52:50.317 you know how to you know machine or
NOTE Confidence: 0.708574986

00:52:50.317 --> 00:52:52.528 like you know that's a you know wasn't
NOTE Confidence: 0.708574986

00:52:52.528 --> 00:52:54.880 you know the same topic on college
NOTE Confidence: 0.708574986

00:52:54.949 --> 00:52:57.163 side how to manage the treatment
NOTE Confidence: 0.708574986

00:52:57.163 --> 00:52:59.520 side but not pathology application.
NOTE Confidence: 0.708574986

00:52:59.520 --> 00:53:01.809 And there's one paper and I'll talk
NOTE Confidence: 0.708574986

00:53:01.809 --> 00:53:03.680 about predicting not you know detect
NOTE Confidence: 0.708574986

00:53:03.680 --> 00:53:05.870 you know follow follow predict with
NOTE Confidence: 0.708574986

00:53:05.870 --> 00:53:08.120 no meta phases based on equity.
NOTE Confidence: 0.708574986

00:53:08.120 --> 00:53:11.045 So very I think this is just a single
NOTE Confidence: 0.708574986

00:53:11.045 --> 00:53:14.057 so we can see here kind of expanding

NOTE Confidence: 0.708574986

00:53:14.057 --> 00:53:15.688 on that I have not presented,

NOTE Confidence: 0.708574986

00:53:15.688 --> 00:53:17.020 we have actually actually we have

NOTE Confidence: 0.708574986

00:53:17.067 --> 00:53:18.119 very very interesting data

NOTE Confidence: 0.728216599

00:53:20.200 --> 00:53:21.950 for publication and we we do find

NOTE Confidence: 0.728216599

00:53:21.950 --> 00:53:24.011 you know you know it's kind of small

NOTE Confidence: 0.728216599

00:53:24.011 --> 00:53:25.800 niche but not you know we're using

NOTE Confidence: 0.728216599

00:53:25.800 --> 00:53:28.051 the AI we're able to tell in for the

NOTE Confidence: 0.728216599

00:53:28.051 --> 00:53:30.368 papadoma first you will see the papaduma

NOTE Confidence: 0.728216599

00:53:30.368 --> 00:53:32.957 but I think we're going to make AI

NOTE Confidence: 0.728216599

00:53:32.960 --> 00:53:34.634 definitely let's let's you know kind

NOTE Confidence: 0.728216599

00:53:34.634 --> 00:53:36.885 of AI is going to be very important

NOTE Confidence: 0.728216599

00:53:36.885 --> 00:53:39.075 you know in practice but how to how

NOTE Confidence: 0.728216599

00:53:39.075 --> 00:53:40.840 to funding you know that niche. So

NOTE Confidence: 0.28572634

00:53:46.280 --> 00:53:48.480 my understanding

NOTE Confidence: 0.38755277

00:53:51.720 --> 00:53:51.800 we

NOTE Confidence: 0.431753392

00:53:54.920 --> 00:53:56.440 have like basically yeah yeah.

NOTE Confidence: 0.6074115275

00:53:57.480 --> 00:53:58.320 So my question is

NOTE Confidence: 0.60616721

00:53:59.920 --> 00:54:02.426 mutations, do you think they both

NOTE Confidence: 0.60616721

00:54:02.426 --> 00:54:05.128 countries like at the same rate or

NOTE Confidence: 0.60616721

00:54:05.128 --> 00:54:07.704 yeah I don't think the truth is going

NOTE Confidence: 0.60616721

00:54:07.704 --> 00:54:09.620 to be distinguisher, it's going to be.

NOTE Confidence: 0.60616721

00:54:09.620 --> 00:54:11.090 So you know I guess it's

NOTE Confidence: 0.60616721

00:54:11.148 --> 00:54:12.838 probably one of the mutation,

NOTE Confidence: 0.60616721

00:54:12.840 --> 00:54:14.328 the highest instance mutation we talked

NOTE Confidence: 0.60616721

00:54:14.328 --> 00:54:16.337 in the old days we talked we also

NOTE Confidence: 0.60616721

00:54:16.337 --> 00:54:17.795 talked about P phase three mutation,

NOTE Confidence: 0.60616721

00:54:17.800 --> 00:54:20.440 you know universal mutation

NOTE Confidence: 0.60616721

00:54:20.440 --> 00:54:22.609 in the all organ system.

NOTE Confidence: 0.60616721

00:54:22.609 --> 00:54:24.877 Now I think you know you know TURD

NOTE Confidence: 0.60616721

00:54:24.877 --> 00:54:26.880 is 80% of plastic tumor will have

NOTE Confidence: 0.60616721

00:54:26.880 --> 00:54:29.080 a will have the turtle mutation.

NOTE Confidence: 0.60616721

00:54:29.080 --> 00:54:30.914 So it's kind of background also in

NOTE Confidence: 0.60616721

00:54:30.914 --> 00:54:32.785 terms of how that playing to role

NOTE Confidence: 0.60616721

00:54:32.785 --> 00:54:35.043 you know TURD will not be be draft

NOTE Confidence: 0.60616721

00:54:35.043 --> 00:54:36.359 or distinguishing different way

NOTE Confidence: 0.60616721

00:54:36.359 --> 00:54:40.240 going to be public going to be just.

NOTE Confidence: 0.60616721

00:54:40.240 --> 00:54:43.200 But again, I think it's kind of TURD FGF 3,

NOTE Confidence: 0.60616721

00:54:43.200 --> 00:54:44.956 they're more link interesting,

NOTE Confidence: 0.60616721

00:54:44.956 --> 00:54:48.104 they're more related to kind of more

NOTE Confidence: 0.60616721

00:54:48.104 --> 00:54:50.714 benign and more less aggressive tumor.

NOTE Confidence: 0.60616721

00:54:50.720 --> 00:54:52.728 My question pressed on the fact that you

NOTE Confidence: 0.60616721

00:54:52.728 --> 00:54:54.519 mentioned that you have that nested fires,

NOTE Confidence: 0.60616721

00:54:54.520 --> 00:54:55.336 right.

NOTE Confidence: 0.60616721

00:54:55.336 --> 00:55:00.720 Yeah, the FGFR 3, yeah, yeah,

NOTE Confidence: 0.60616721

00:55:00.720 --> 00:55:01.780 yeah.

NOTE Confidence: 0.60616721

00:55:01.780 --> 00:55:04.758 So if if we would have a tumor

NOTE Confidence: 0.60616721

00:55:04.758 --> 00:55:06.559 that derived from the popularity,
NOTE Confidence: 0.60616721

00:55:06.560 --> 00:55:09.760 yeah would that mean that it lost the
NOTE Confidence: 0.60616721

00:55:09.760 --> 00:55:14.380 FGFR 3 as if we think well if it just
NOTE Confidence: 0.60616721

00:55:14.380 --> 00:55:16.606 is not you know nowadays we have to
NOTE Confidence: 0.60616721

00:55:16.606 --> 00:55:18.514 break the concept of mutations bad,
NOTE Confidence: 0.60616721

00:55:18.520 --> 00:55:20.564 you know it's worth isn't a lot
NOTE Confidence: 0.60616721

00:55:20.564 --> 00:55:22.349 of mutation not just in the
NOTE Confidence: 0.60616721

00:55:22.349 --> 00:55:24.309 bladder but also you know you can
NOTE Confidence: 0.60616721

00:55:24.373 --> 00:55:26.640 see mutation in the non lesions.
NOTE Confidence: 0.60616721

00:55:26.640 --> 00:55:28.540 So funding mutation really doesn't
NOTE Confidence: 0.60616721

00:55:28.540 --> 00:55:30.969 mean you know you can have P for
NOTE Confidence: 0.60616721

00:55:30.969 --> 00:55:33.376 three mutation a bit in the banana
NOTE Confidence: 0.60616721

00:55:33.376 --> 00:55:35.236 lesions as well including bladder.
NOTE Confidence: 0.60616721

00:55:35.240 --> 00:55:37.571 So it's not you know signature you
NOTE Confidence: 0.60616721

00:55:37.571 --> 00:55:40.000 know I think more moving forward
NOTE Confidence: 0.60616721

00:55:40.000 --> 00:55:43.276 we can look look into the profile

NOTE Confidence: 0.60616721

00:55:43.280 --> 00:55:45.272 for example in the bladder the

NOTE Confidence: 0.60616721

00:55:45.272 --> 00:55:47.282 certain cubic type like basal type

NOTE Confidence: 0.60616721

00:55:47.282 --> 00:55:49.669 a neuronal type those are use of

NOTE Confidence: 0.60616721

00:55:49.669 --> 00:55:50.844 molecular classification probably

NOTE Confidence: 0.60616721

00:55:50.844 --> 00:55:53.504 going to be more useful in terms

NOTE Confidence: 0.60616721

00:55:53.504 --> 00:55:56.067 of of non frame not just how to you

NOTE Confidence: 0.60616721

00:55:56.067 --> 00:55:58.195 know how it's it's not single genes

NOTE Confidence: 0.60616721

00:55:58.195 --> 00:56:00.704 you know that going to defining you

NOTE Confidence: 0.60616721

00:56:00.704 --> 00:56:03.094 know the pathway obviously but again

NOTE Confidence: 0.60616721

00:56:03.094 --> 00:56:05.523 there's a few key players you know

NOTE Confidence: 0.60616721

00:56:05.523 --> 00:56:07.725 just less going to be important

NOTE Confidence: 0.60616721

00:56:07.725 --> 00:56:09.851 and and I think you know there's a

NOTE Confidence: 0.60616721

00:56:09.851 --> 00:56:11.815 probably if you put all together I

NOTE Confidence: 0.60616721

00:56:11.815 --> 00:56:13.531 think like you know just research

NOTE Confidence: 0.60616721

00:56:13.594 --> 00:56:15.280 it's common FGF stream mutation

NOTE Confidence: 0.60616721

00:56:15.280 --> 00:56:18.299 it's a it's a it can happen both
NOTE Confidence: 0.60616721

00:56:18.299 --> 00:56:20.384 in aggressive non aggressive but
NOTE Confidence: 0.60616721

00:56:20.384 --> 00:56:22.732 in terms of preference wise it's
NOTE Confidence: 0.60616721

00:56:22.732 --> 00:56:25.280 more commonly seen in less you know
NOTE Confidence: 0.60616721

00:56:25.348 --> 00:56:27.560 superficial less aggressive tumor.
NOTE Confidence: 0.60616721

00:56:27.560 --> 00:56:29.160 In terms of general preference
NOTE Confidence: 0.026132468

00:56:56.640 --> 00:56:56.760 the
NOTE Confidence: 0.6861159825

00:57:17.320 --> 00:57:21.200 yeah we this is very very kind of
NOTE Confidence: 0.6861159825

00:57:21.200 --> 00:57:24.698 important question you know So what
NOTE Confidence: 0.6861159825

00:57:24.698 --> 00:57:27.030 molecular classification going to
NOTE Confidence: 0.6861159825

00:57:27.123 --> 00:57:30.800 come into play in our practice and our
NOTE Confidence: 0.6861159825

00:57:30.800 --> 00:57:34.568 soup have assembled the team address
NOTE Confidence: 0.6861159825

00:57:34.568 --> 00:57:37.820 the same almost the same question
NOTE Confidence: 0.6861159825

00:57:37.915 --> 00:57:40.456 twice in the 19/20/19 and also 2022.
NOTE Confidence: 0.6861159825

00:57:40.456 --> 00:57:43.068 The paper you know that we're going
NOTE Confidence: 0.6861159825

00:57:43.068 --> 00:57:45.210 to be publishing in January you

NOTE Confidence: 0.6861159825

00:57:45.210 --> 00:57:47.492 know that's in the in the currently

NOTE Confidence: 0.6861159825

00:57:47.492 --> 00:57:50.204 our singular conclusion is that in

NOTE Confidence: 0.6861159825

00:57:50.204 --> 00:57:52.805 unless it has code great potential

NOTE Confidence: 0.6861159825

00:57:52.805 --> 00:57:56.080 but it will be take some time become

NOTE Confidence: 0.6861159825

00:57:56.080 --> 00:58:00.810 clinically useful or adapted into

NOTE Confidence: 0.6861159825

00:58:00.810 --> 00:58:04.376 our current you know practice.

NOTE Confidence: 0.6861159825

00:58:04.376 --> 00:58:06.256 But nonetheless let's really very

NOTE Confidence: 0.6861159825

00:58:06.256 --> 00:58:08.418 exciting I'm thinking about if you're

NOTE Confidence: 0.6861159825

00:58:08.418 --> 00:58:11.400 looking at some data you know it's a

NOTE Confidence: 0.6861159825

00:58:11.400 --> 00:58:14.600 molecular subtype like neuronal like

NOTE Confidence: 0.6861159825

00:58:14.600 --> 00:58:18.000 subtype those are associated with

NOTE Confidence: 0.6861159825

00:58:18.000 --> 00:58:20.284 that data immunotherapy treatment.

NOTE Confidence: 0.6861159825

00:58:20.284 --> 00:58:23.518 So definitely and also we we just

NOTE Confidence: 0.6861159825

00:58:23.518 --> 00:58:26.558 started I think we're you know I think

NOTE Confidence: 0.6861159825

00:58:26.558 --> 00:58:28.929 that's that's really we just see the

NOTE Confidence: 0.6861159825

00:58:28.929 --> 00:58:31.232 body which is still we see we start

NOTE Confidence: 0.6861159825

00:58:31.232 --> 00:58:33.447 to see the ball the evidence has been

NOTE Confidence: 0.6861159825

00:58:33.447 --> 00:58:35.591 built up you know that you know so,

NOTE Confidence: 0.6861159825

00:58:35.600 --> 00:58:38.444 so I think you know so but at the

NOTE Confidence: 0.6861159825

00:58:38.444 --> 00:58:40.870 moment at this as today or maybe even

NOTE Confidence: 0.6861159825

00:58:40.870 --> 00:58:43.643 next year and I think we can probably

NOTE Confidence: 0.6861159825

00:58:43.643 --> 00:58:45.876 reliable predict this it's unlikely going

NOTE Confidence: 0.6861159825

00:58:45.876 --> 00:58:48.200 to come into our daily practice yet.

NOTE Confidence: 0.6861159825

00:58:48.200 --> 00:58:48.400 So

NOTE Confidence: 0.817020225

00:58:55.400 --> 00:58:55.680 thank you.