

WEBVTT

NOTE duration: "01:02:04.074"

NOTE Confidence: 0.982605

00:00:00.160 --> 00:00:01.839 Good afternoon, everybody. It gives

NOTE Confidence: 0.982605

00:00:01.839 --> 00:00:02.980 me great pleasure

NOTE Confidence: 1

00:00:03.399 --> 00:00:03.899 to

NOTE Confidence: 0.8470256

00:00:04.319 --> 00:00:06.439 introduce doctor Eddie Brogi for

NOTE Confidence: 0.8470256

00:00:06.439 --> 00:00:06.559 her,

NOTE Confidence: 0.8989258

00:00:08.480 --> 00:00:08.980 lecture

NOTE Confidence: 1

00:00:09.280 --> 00:00:09.780 on

NOTE Confidence: 0.90372723

00:00:10.080 --> 00:00:12.080 the WHO six breast tumors

NOTE Confidence: 0.90372723

00:00:12.080 --> 00:00:12.580 classification,

NOTE Confidence: 0.99768066

00:00:12.880 --> 00:00:14.019 what's new and noteworthy

NOTE Confidence: 0.9585937

00:00:14.705 --> 00:00:16.645 for the pathology grand rounds.

NOTE Confidence: 0.9961751

00:00:17.185 --> 00:00:18.485 And she's internationally

NOTE Confidence: 0.9975586

00:00:18.945 --> 00:00:20.305 very well known to all

NOTE Confidence: 0.9975586

00:00:20.305 --> 00:00:20.965 the people

NOTE Confidence: 0.9630615

00:00:21.345 --> 00:00:23.345 practicing breast pathology, needs no

NOTE Confidence: 0.9630615

00:00:23.345 --> 00:00:25.125 introduction. I'll keep it brief.

NOTE Confidence: 0.9639388

00:00:25.505 --> 00:00:27.505 Doctor Brodie got her, she's

NOTE Confidence: 0.9639388

00:00:27.505 --> 00:00:29.460 currently director of the breast

NOTE Confidence: 0.9639388

00:00:29.699 --> 00:00:32.100 pathology service in Memorial Sloan

NOTE Confidence: 0.9639388

00:00:32.100 --> 00:00:33.860 Kettering Cancer Center and has

NOTE Confidence: 0.9639388

00:00:33.860 --> 00:00:35.479 been the director there for

NOTE Confidence: 0.9639388

00:00:35.780 --> 00:00:37.159 close to twenty years.

NOTE Confidence: 0.992513

00:00:37.620 --> 00:00:38.899 And she got her MD

NOTE Confidence: 0.992513

00:00:38.899 --> 00:00:40.420 from the University of Florence

NOTE Confidence: 0.992513

00:00:40.420 --> 00:00:41.159 in Italy

NOTE Confidence: 0.75024414

00:00:41.860 --> 00:00:42.579 and then,

NOTE Confidence: 0.9798177

00:00:43.545 --> 00:00:44.845 completed her PhD

NOTE Confidence: 0.946228

00:00:45.465 --> 00:00:47.784 from the Italian Ministry of

NOTE Confidence: 0.946228

00:00:47.784 --> 00:00:49.005 University and Research,

NOTE Confidence: 0.98431396

00:00:49.385 --> 00:00:50.505 and she then moved to

NOTE Confidence: 0.98431396
00:00:50.505 --> 00:00:51.784 Boston where she was a
NOTE Confidence: 0.98431396
00:00:51.784 --> 00:00:53.085 postdoctoral fellow
NOTE Confidence: 0.83947754
00:00:53.545 --> 00:00:54.285 and then,
NOTE Confidence: 0.9937337
00:00:55.225 --> 00:00:57.085 did her residency in anatomic
NOTE Confidence: 0.9937337
00:00:57.225 --> 00:00:57.725 pathology
NOTE Confidence: 1
00:00:58.370 --> 00:00:58.870 at
NOTE Confidence: 0.97439575
00:00:59.329 --> 00:01:00.770 MGH and followed by a
NOTE Confidence: 0.97439575
00:01:00.770 --> 00:01:01.989 fellowship in cytopathology
NOTE Confidence: 0.85038704
00:01:03.410 --> 00:01:04.850 and then moved as an
NOTE Confidence: 0.85038704
00:01:04.850 --> 00:01:06.470 attending to MIMO MSKCC
NOTE Confidence: 0.9458008
00:01:06.930 --> 00:01:08.390 in two thousand from where
NOTE Confidence: 0.98863
00:01:08.690 --> 00:01:09.810 she's been there and is
NOTE Confidence: 0.98863
00:01:09.810 --> 00:01:10.550 now professor
NOTE Confidence: 0.9448242
00:01:11.170 --> 00:01:11.569 in,
NOTE Confidence: 0.90152997
00:01:11.970 --> 00:01:13.590 Cornell Medical College.
NOTE Confidence: 0.99902344

00:01:14.174 --> 00:01:14.674 And
NOTE Confidence: 0.99641925
00:01:15.134 --> 00:01:17.134 she she received an award
NOTE Confidence: 0.99641925
00:01:17.134 --> 00:01:18.834 for her graduation thesis,
NOTE Confidence: 0.9483887
00:01:19.534 --> 00:01:21.055 during her MD and more
NOTE Confidence: 0.9483887
00:01:21.055 --> 00:01:22.834 recently got the Larry Norton
NOTE Confidence: 0.8770955
00:01:23.375 --> 00:01:25.055 excellence in pathology award by
NOTE Confidence: 0.8770955
00:01:25.055 --> 00:01:27.375 the International Society of pet
NOTE Confidence: 0.8770955
00:01:27.694 --> 00:01:28.595 breast pathology.
NOTE Confidence: 0.9741699
00:01:29.380 --> 00:01:30.660 I'm not listing all the
NOTE Confidence: 0.9741699
00:01:30.660 --> 00:01:31.700 awards. This is just the
NOTE Confidence: 0.9741699
00:01:31.700 --> 00:01:33.720 top. And then she has,
NOTE Confidence: 0.98801
00:01:34.340 --> 00:01:35.319 been a CME,
NOTE Confidence: 0.99331665
00:01:35.860 --> 00:01:37.700 course director for the breast
NOTE Confidence: 0.99331665
00:01:37.700 --> 00:01:40.200 section of the surgical pathology
NOTE Confidence: 0.99331665
00:01:40.260 --> 00:01:42.500 of neoplastic diseases offered by
NOTE Confidence: 0.99331665
00:01:42.500 --> 00:01:43.000 MSKCC

NOTE Confidence: 0.9714731
00:01:43.300 --> 00:01:44.825 every year, and this has
NOTE Confidence: 0.9714731
00:01:44.825 --> 00:01:46.665 been for decades. And she
NOTE Confidence: 0.9714731
00:01:46.665 --> 00:01:48.045 served as president
NOTE Confidence: 0.9610189
00:01:48.425 --> 00:01:50.185 of the International Society of
NOTE Confidence: 0.9610189
00:01:50.185 --> 00:01:52.285 Breast Pathology, served on ASCAP
NOTE Confidence: 0.892395
00:01:53.225 --> 00:01:54.685 and other leading societies,
NOTE Confidence: 0.9980469
00:01:55.305 --> 00:01:55.805 and
NOTE Confidence: 0.99401855
00:01:56.880 --> 00:01:58.320 authored more than two hundred
NOTE Confidence: 0.99401855
00:01:58.320 --> 00:01:59.460 peer reviewed publication
NOTE Confidence: 0.9946289
00:02:00.560 --> 00:02:01.060 publications,
NOTE Confidence: 0.96417236
00:02:02.080 --> 00:02:04.180 chapters, book chapters, reviews,
NOTE Confidence: 0.9995117
00:02:04.880 --> 00:02:05.380 mentored
NOTE Confidence: 0.9753418
00:02:06.480 --> 00:02:07.780 multi multiple
NOTE Confidence: 0.9266532
00:02:08.735 --> 00:02:10.735 fellows in breast, including our
NOTE Confidence: 0.9266532
00:02:10.735 --> 00:02:11.555 own faculty,
NOTE Confidence: 0.90893555

00:02:12.094 --> 00:02:12.995 doctor Lorraine
NOTE Confidence: 0.5125224

00:02:13.375 --> 00:02:13.875 Kronkartegena.
NOTE Confidence: 0.9511719

00:02:14.575 --> 00:02:15.075 And,
NOTE Confidence: 0.9902344

00:02:16.734 --> 00:02:17.234 and
NOTE Confidence: 0.99367267

00:02:18.174 --> 00:02:19.935 she's on the editorial she's
NOTE Confidence: 0.99367267

00:02:19.935 --> 00:02:22.000 an editorial board member of
NOTE Confidence: 0.99367267

00:02:22.000 --> 00:02:22.580 the WHO
NOTE Confidence: 0.98179626

00:02:22.960 --> 00:02:24.639 classification of breast tumors, the
NOTE Confidence: 0.98179626

00:02:24.639 --> 00:02:26.100 fifth and the sixth edition.
NOTE Confidence: 0.98179626

00:02:26.320 --> 00:02:28.240 So without further ado, I
NOTE Confidence: 0.98179626

00:02:28.240 --> 00:02:28.740 will
NOTE Confidence: 0.9962891

00:02:29.040 --> 00:02:30.260 hand it over to you.
NOTE Confidence: 0.96048254

00:02:35.084 --> 00:02:37.084 Good afternoon, everyone. Thank you
NOTE Confidence: 0.96048254

00:02:37.084 --> 00:02:39.245 very much, doctor Krishnamurti for
NOTE Confidence: 0.96048254

00:02:39.245 --> 00:02:40.924 the kind introduction. It's a
NOTE Confidence: 0.96048254

00:02:40.924 --> 00:02:42.364 pleasure to be here with

NOTE Confidence: 0.96048254
00:02:42.364 --> 00:02:43.105 you today,
NOTE Confidence: 0.9066569
00:02:43.644 --> 00:02:45.084 and I had a great
NOTE Confidence: 0.9066569
00:02:45.084 --> 00:02:47.245 morning. I spent interacting with
NOTE Confidence: 0.9066569
00:02:47.245 --> 00:02:49.400 the the staff, the residents,
NOTE Confidence: 0.9581822
00:02:50.580 --> 00:02:52.340 reviewing cases. It's really a
NOTE Confidence: 0.9581822
00:02:52.340 --> 00:02:53.239 very dynamic
NOTE Confidence: 0.9411621
00:02:53.940 --> 00:02:55.080 breast pathology
NOTE Confidence: 0.9080287
00:02:55.459 --> 00:02:57.700 service and I really enjoyed
NOTE Confidence: 0.9080287
00:02:57.700 --> 00:02:59.139 and it's nice to meet
NOTE Confidence: 0.9080287
00:02:59.139 --> 00:03:01.300 friends, make new ones. So
NOTE Confidence: 0.9080287
00:03:01.300 --> 00:03:02.419 I'm really happy to be
NOTE Confidence: 0.9080287
00:03:02.419 --> 00:03:02.919 here.
NOTE Confidence: 0.99560547
00:03:03.905 --> 00:03:04.644 My topic
NOTE Confidence: 0.88623047
00:03:04.944 --> 00:03:05.444 is,
NOTE Confidence: 0.84440106
00:03:06.224 --> 00:03:07.125 on the educational
NOTE Confidence: 0.9375407

00:03:07.504 --> 00:03:10.325 side, very focused on breast
NOTE Confidence: 0.9375407

00:03:10.385 --> 00:03:10.885 pathology,
NOTE Confidence: 0.9094238

00:03:11.424 --> 00:03:12.084 of course.
NOTE Confidence: 0.9346191

00:03:12.705 --> 00:03:14.465 And, I, as you all
NOTE Confidence: 0.9346191

00:03:14.465 --> 00:03:16.084 know, why do we need
NOTE Confidence: 0.9449463

00:03:22.150 --> 00:03:23.849 nomenclature that can be adopted
NOTE Confidence: 0.9449463

00:03:23.989 --> 00:03:24.489 worldwide,
NOTE Confidence: 0.9291748

00:03:25.030 --> 00:03:27.349 is evidence based, provides a
NOTE Confidence: 0.9291748

00:03:27.349 --> 00:03:30.105 standardized framework to for categorization
NOTE Confidence: 0.9926758

00:03:30.485 --> 00:03:31.224 of tumors
NOTE Confidence: 0.96813965

00:03:31.605 --> 00:03:34.084 so that everybody can render
NOTE Confidence: 0.96813965

00:03:34.084 --> 00:03:35.465 the right diagnosis
NOTE Confidence: 0.99017334

00:03:35.845 --> 00:03:37.864 using a similar terminology.
NOTE Confidence: 0.9765625

00:03:38.724 --> 00:03:39.224 Therefore,
NOTE Confidence: 0.9638265

00:03:39.845 --> 00:03:41.305 we can guide the therapeutic
NOTE Confidence: 0.9638265

00:03:41.444 --> 00:03:41.944 strategies,

NOTE Confidence: 0.9298096
00:03:42.485 --> 00:03:43.705 inform research,
NOTE Confidence: 0.96416014
00:03:44.600 --> 00:03:46.940 and enable also the precise
NOTE Confidence: 0.9370117
00:03:47.560 --> 00:03:48.060 epidemiological
NOTE Confidence: 0.96325684
00:03:49.160 --> 00:03:49.980 data collection,
NOTE Confidence: 0.99403214
00:03:51.160 --> 00:03:52.459 by cancer registries.
NOTE Confidence: 0.9008789
00:03:53.319 --> 00:03:54.459 In fact, in this
NOTE Confidence: 0.84155273
00:03:54.840 --> 00:03:55.340 optic,
NOTE Confidence: 0.9206814
00:03:55.800 --> 00:03:58.060 the sixth edition series differs
NOTE Confidence: 0.9206814
00:03:58.120 --> 00:04:00.275 from the prior because obviously
NOTE Confidence: 0.9206814
00:04:00.275 --> 00:04:02.215 it provides update, but also
NOTE Confidence: 0.9206814
00:04:02.275 --> 00:04:03.655 has included oncology,
NOTE Confidence: 0.96260583
00:04:03.955 --> 00:04:05.095 radiology, molecular,
NOTE Confidence: 0.9506836
00:04:05.635 --> 00:04:06.135 genetics,
NOTE Confidence: 0.6942749
00:04:06.754 --> 00:04:07.735 expert. And
NOTE Confidence: 0.8496094
00:04:08.355 --> 00:04:08.855 also
NOTE Confidence: 0.6630249

00:04:09.235 --> 00:04:11.015 as included the pathologists
NOTE Confidence: 0.9777832

00:04:11.555 --> 00:04:13.010 that practice in low and
NOTE Confidence: 0.9777832

00:04:13.010 --> 00:04:13.510 middle
NOTE Confidence: 0.99853516

00:04:13.810 --> 00:04:14.870 income countries
NOTE Confidence: 0.9356166

00:04:15.330 --> 00:04:17.010 so that, it can really
NOTE Confidence: 0.9356166

00:04:17.010 --> 00:04:18.930 be used, you know, the
NOTE Confidence: 0.9356166

00:04:18.930 --> 00:04:20.470 classification can be really,
NOTE Confidence: 0.77978516

00:04:22.850 --> 00:04:23.669 used worldwide
NOTE Confidence: 0.7409668

00:04:24.130 --> 00:04:24.630 and,
NOTE Confidence: 0.9760742

00:04:25.675 --> 00:04:26.175 contribute
NOTE Confidence: 0.99501956

00:04:26.475 --> 00:04:28.095 to the management of patients
NOTE Confidence: 0.9929199

00:04:28.555 --> 00:04:29.695 all over the world.
NOTE Confidence: 0.9390869

00:04:30.154 --> 00:04:31.535 This is the first picture
NOTE Confidence: 0.9390869

00:04:31.595 --> 00:04:33.595 that was taken when we
NOTE Confidence: 0.9390869

00:04:33.595 --> 00:04:35.035 first met for the first
NOTE Confidence: 0.9390869

00:04:35.035 --> 00:04:37.134 editorial board meeting in October

NOTE Confidence: 0.9390869
00:04:37.275 --> 00:04:37.775 second.
NOTE Confidence: 0.94957554
00:04:38.235 --> 00:04:40.074 On October second twenty twenty
NOTE Confidence: 0.94957554
00:04:40.074 --> 00:04:42.289 four in Lyon, France. There
NOTE Confidence: 0.94957554
00:04:42.289 --> 00:04:43.270 was a subsequent
NOTE Confidence: 0.99620473
00:04:43.729 --> 00:04:45.910 in person meeting in February.
NOTE Confidence: 0.99620473
00:04:46.050 --> 00:04:47.729 During this time, October to
NOTE Confidence: 0.99620473
00:04:47.729 --> 00:04:48.229 February,
NOTE Confidence: 0.99930245
00:04:48.529 --> 00:04:50.550 we were supposed to revise
NOTE Confidence: 0.99930245
00:04:50.770 --> 00:04:51.509 and rewrite
NOTE Confidence: 0.98746747
00:04:51.810 --> 00:04:53.589 the WHO classification.
NOTE Confidence: 0.9923096
00:04:54.050 --> 00:04:55.110 It was an intense
NOTE Confidence: 0.97314453
00:04:55.490 --> 00:04:58.055 writing and rewriting period.
NOTE Confidence: 0.96570766
00:04:59.075 --> 00:05:00.755 The classification is not out
NOTE Confidence: 0.96570766
00:05:00.755 --> 00:05:02.835 yet because after we met
NOTE Confidence: 0.96570766
00:05:02.835 --> 00:05:03.975 the second time,
NOTE Confidence: 0.97058105

00:05:04.515 --> 00:05:06.775 we also had to discuss
NOTE Confidence: 0.97058105

00:05:06.835 --> 00:05:07.815 a few points,
NOTE Confidence: 0.9748047

00:05:08.195 --> 00:05:09.315 but I think it will
NOTE Confidence: 0.9748047

00:05:09.315 --> 00:05:11.654 be published hopefully this year,
NOTE Confidence: 0.9202881

00:05:12.400 --> 00:05:14.100 very soon this year.
NOTE Confidence: 0.9421387

00:05:14.640 --> 00:05:14.960 And,
NOTE Confidence: 0.9913635

00:05:16.080 --> 00:05:17.920 what is different compared to
NOTE Confidence: 0.9913635

00:05:17.920 --> 00:05:19.060 the prior classification?
NOTE Confidence: 0.98981935

00:05:19.360 --> 00:05:21.279 Well, first of all, there
NOTE Confidence: 0.98981935

00:05:21.279 --> 00:05:22.660 is a lot of preparatory
NOTE Confidence: 0.94750977

00:05:23.040 --> 00:05:24.660 work that went into,
NOTE Confidence: 0.8590088

00:05:25.225 --> 00:05:25.965 this classification.
NOTE Confidence: 0.98466796

00:05:26.505 --> 00:05:28.125 And there were many subcommittees
NOTE Confidence: 0.9975586

00:05:28.825 --> 00:05:29.565 that met
NOTE Confidence: 0.8722168

00:05:29.945 --> 00:05:31.485 that dealt with the specific,
NOTE Confidence: 0.99902344

00:05:32.345 --> 00:05:32.845 points

NOTE Confidence: 0.9938616
00:05:33.385 --> 00:05:35.225 that could facilitate a more
NOTE Confidence: 0.9938616
00:05:35.225 --> 00:05:36.285 precise classification.
NOTE Confidence: 0.8878038
00:05:36.665 --> 00:05:38.539 I was also member of
NOTE Confidence: 0.8878038
00:05:38.539 --> 00:05:39.680 the two more clarification
NOTE Confidence: 0.7401123
00:05:40.300 --> 00:05:41.120 and refining
NOTE Confidence: 0.919608
00:05:42.060 --> 00:05:43.259 committee. So we all had
NOTE Confidence: 0.919608
00:05:43.259 --> 00:05:43.919 a preparatory
NOTE Confidence: 0.970988
00:05:44.300 --> 00:05:46.060 work. We met many times
NOTE Confidence: 0.970988
00:05:46.060 --> 00:05:46.560 online.
NOTE Confidence: 0.5301921
00:05:47.099 --> 00:05:48.319 So to identify
NOTE Confidence: 0.9243164
00:05:49.020 --> 00:05:49.520 specific
NOTE Confidence: 0.7607422
00:05:50.765 --> 00:05:51.265 that
NOTE Confidence: 0.73185223
00:05:52.045 --> 00:05:52.865 needed to be
NOTE Confidence: 0.78125
00:05:53.805 --> 00:05:54.305 addressed
NOTE Confidence: 0.98258466
00:05:54.765 --> 00:05:55.904 by the upcoming
NOTE Confidence: 0.90649414

00:05:56.285 --> 00:05:56.785 classification.
NOTE Confidence: 0.8609169

00:05:57.565 --> 00:05:59.325 And of course, everything had
NOTE Confidence: 0.8609169

00:05:59.325 --> 00:06:01.265 to be evidence based. Basically,
NOTE Confidence: 0.8609169

00:06:01.404 --> 00:06:02.365 I think. These are the
NOTE Confidence: 0.8609169

00:06:02.365 --> 00:06:04.610 various chapters in the
NOTE Confidence: 0.8263482

00:06:04.910 --> 00:06:06.830 classification. I don't know. Someone
NOTE Confidence: 0.8263482

00:06:06.830 --> 00:06:08.050 is probably I understand.
NOTE Confidence: 0.94601005

00:06:08.510 --> 00:06:10.110 Can you please mute your
NOTE Confidence: 0.94601005

00:06:10.110 --> 00:06:12.449 butt your microphone? Thank you.
NOTE Confidence: 0.94601005

00:06:12.669 --> 00:06:13.729 Thank you so much.
NOTE Confidence: 0.9932617

00:06:14.750 --> 00:06:16.370 And, these are the various
NOTE Confidence: 0.97563475

00:06:17.595 --> 00:06:19.775 chapters in the upcoming classification.
NOTE Confidence: 0.9928711

00:06:20.315 --> 00:06:22.095 So I'll focus on comparing
NOTE Confidence: 0.95354354

00:06:22.714 --> 00:06:24.235 what is different and new
NOTE Confidence: 0.95354354

00:06:24.235 --> 00:06:24.975 and noteworthy
NOTE Confidence: 0.98768836

00:06:25.275 --> 00:06:26.795 between the fourth and the

NOTE Confidence: 0.98768836

00:06:26.795 --> 00:06:27.695 sixth edition.

NOTE Confidence: 0.9540405

00:06:28.315 --> 00:06:29.195 Of course, I cannot,

NOTE Confidence: 0.96280926

00:06:29.675 --> 00:06:31.600 discuss all the various changes

NOTE Confidence: 0.96280926

00:06:31.740 --> 00:06:32.240 because

NOTE Confidence: 0.9201416

00:06:32.540 --> 00:06:33.980 it would take not one

NOTE Confidence: 0.9201416

00:06:33.980 --> 00:06:35.680 hour but maybe one month,

NOTE Confidence: 0.9935128

00:06:36.060 --> 00:06:37.660 but I'll focus on some

NOTE Confidence: 0.9935128

00:06:37.660 --> 00:06:38.960 specific information.

NOTE Confidence: 0.9778583

00:06:39.500 --> 00:06:40.700 First of all, the general

NOTE Confidence: 0.9778583

00:06:40.700 --> 00:06:42.700 introduction that was extremely long

NOTE Confidence: 0.9778583

00:06:42.700 --> 00:06:43.600 in the original

NOTE Confidence: 0.98723495

00:06:44.404 --> 00:06:45.685 In the fifth edition has

NOTE Confidence: 0.98723495

00:06:45.685 --> 00:06:46.665 been shortened

NOTE Confidence: 0.8730469

00:06:47.285 --> 00:06:48.645 and the the information that

NOTE Confidence: 0.8730469

00:06:48.645 --> 00:06:50.404 pertains to specific tumor has

NOTE Confidence: 0.8730469

00:06:50.404 --> 00:06:52.265 been included in small introduction

NOTE Confidence: 0.9626465

00:06:52.805 --> 00:06:54.985 in each tumor specific chapter.

NOTE Confidence: 0.923645

00:06:55.605 --> 00:06:56.885 There is a section also

NOTE Confidence: 0.923645

00:06:56.885 --> 00:06:58.185 known small diagnostic

NOTE Confidence: 0.8994751

00:06:58.580 --> 00:07:00.040 sample, fine needle aspiration,

NOTE Confidence: 0.86322695

00:07:00.420 --> 00:07:01.640 core needle biopsy,

NOTE Confidence: 0.9790039

00:07:02.020 --> 00:07:02.520 how,

NOTE Confidence: 0.972229

00:07:03.140 --> 00:07:05.380 it should be reported. They

NOTE Confidence: 0.972229

00:07:05.380 --> 00:07:06.200 should be reported

NOTE Confidence: 0.96240234

00:07:06.660 --> 00:07:07.720 with a standardized

NOTE Confidence: 0.97699654

00:07:08.260 --> 00:07:10.200 system. In particular, there is

NOTE Confidence: 0.97699654

00:07:10.495 --> 00:07:11.694 an emphasis on the b

NOTE Confidence: 0.97699654

00:07:11.694 --> 00:07:13.555 coding system that is used

NOTE Confidence: 0.97699654

00:07:13.615 --> 00:07:14.514 in the UK

NOTE Confidence: 0.83780926

00:07:14.895 --> 00:07:16.435 mainly for categorizing

NOTE Confidence: 0.88826495

00:07:17.055 --> 00:07:19.155 breast corneal biopsy finding,

NOTE Confidence: 0.9970703
00:07:19.535 --> 00:07:20.995 emphasis on the clinical
NOTE Confidence: 0.875
00:07:21.535 --> 00:07:22.675 triple assessment,
NOTE Confidence: 0.9239153
00:07:23.460 --> 00:07:26.100 combining ideology, pathology, and also
NOTE Confidence: 0.9239153
00:07:26.100 --> 00:07:27.240 clinical interpretation.
NOTE Confidence: 0.9504743
00:07:27.860 --> 00:07:29.480 And there is an information
NOTE Confidence: 0.9504743
00:07:29.700 --> 00:07:31.540 about the use of digital
NOTE Confidence: 0.9504743
00:07:31.540 --> 00:07:33.560 pathology and artificial intelligence
NOTE Confidence: 0.9609375
00:07:34.100 --> 00:07:35.880 that is really coming up
NOTE Confidence: 0.9609375
00:07:35.940 --> 00:07:37.400 on on the horizon
NOTE Confidence: 0.99820966
00:07:37.975 --> 00:07:39.115 in many departments.
NOTE Confidence: 0.9540759
00:07:40.375 --> 00:07:42.395 Then the section on epithelial
NOTE Confidence: 0.9540759
00:07:42.535 --> 00:07:44.295 tumor has been split into
NOTE Confidence: 0.9540759
00:07:44.295 --> 00:07:46.055 two parts. The first part
NOTE Confidence: 0.9540759
00:07:46.055 --> 00:07:48.115 basically deals with the,
NOTE Confidence: 0.8864746
00:07:49.815 --> 00:07:50.875 all intraductal
NOTE Confidence: 0.95422363

00:07:51.419 --> 00:07:53.520 proliferation ranging from benign
NOTE Confidence: 0.91101074

00:07:53.820 --> 00:07:54.479 to malignant,
NOTE Confidence: 0.7939453

00:07:54.780 --> 00:07:55.360 the DCIS.
NOTE Confidence: 0.98690796

00:07:56.300 --> 00:07:57.660 And then in this section,
NOTE Confidence: 0.98690796

00:07:57.660 --> 00:07:58.720 there are also
NOTE Confidence: 0.90901697

00:07:59.100 --> 00:08:01.100 epithelial, my epithelial tumors that
NOTE Confidence: 0.90901697

00:08:01.100 --> 00:08:02.000 can be invasive
NOTE Confidence: 0.94195557

00:08:02.460 --> 00:08:04.320 and also some papillary neoplasm
NOTE Confidence: 0.94195557

00:08:04.585 --> 00:08:06.264 that can be invasive. So
NOTE Confidence: 0.94195557

00:08:06.264 --> 00:08:07.085 not everything
NOTE Confidence: 0.9897461

00:08:07.625 --> 00:08:08.284 in this
NOTE Confidence: 0.6242676

00:08:08.664 --> 00:08:08.985 part,
NOTE Confidence: 0.9555664

00:08:09.625 --> 00:08:11.004 one is really
NOTE Confidence: 0.8630371

00:08:12.025 --> 00:08:13.485 within the dots.
NOTE Confidence: 0.9346161

00:08:13.865 --> 00:08:15.565 I'll start with adenomyopiteloma,
NOTE Confidence: 0.9949341

00:08:16.425 --> 00:08:17.565 malignant adenomyopiteloma.

NOTE Confidence: 0.95839965
00:08:18.990 --> 00:08:20.430 They are included in the
NOTE Confidence: 0.95839965
00:08:20.430 --> 00:08:22.290 section on epithelial and myepithelial
NOTE Confidence: 0.95839965
00:08:22.510 --> 00:08:23.790 tumors. As you all know,
NOTE Confidence: 0.95839965
00:08:23.790 --> 00:08:25.950 adenoid cystic carcinoma is also
NOTE Confidence: 0.95839965
00:08:25.950 --> 00:08:28.270 an epithelial myepithelial carcinoma, but
NOTE Confidence: 0.95839965
00:08:28.270 --> 00:08:29.010 is discussed
NOTE Confidence: 0.9714471
00:08:29.630 --> 00:08:31.230 under rare and salivary gland
NOTE Confidence: 0.9714471
00:08:31.230 --> 00:08:32.235 type tumors.
NOTE Confidence: 0.96327496
00:08:32.855 --> 00:08:35.035 There was, you know, adenomy
NOTE Confidence: 0.96327496
00:08:35.095 --> 00:08:36.715 epithelioma from a histopathology
NOTE Confidence: 0.86870116
00:08:37.095 --> 00:08:38.054 point of view, where low
NOTE Confidence: 0.86870116
00:08:38.054 --> 00:08:40.075 power has typically this multilobulated
NOTE Confidence: 0.9062733
00:08:40.775 --> 00:08:43.355 contour with central sclerotic area,
NOTE Confidence: 0.9062733
00:08:43.415 --> 00:08:44.475 fibrous septae.
NOTE Confidence: 0.9313965
00:08:44.910 --> 00:08:46.850 The WHO six edition,
NOTE Confidence: 0.9523926

00:08:47.389 --> 00:08:47.889 group,
NOTE Confidence: 0.9169922

00:08:48.589 --> 00:08:50.769 has agreed that finding small
NOTE Confidence: 0.9169922

00:08:50.829 --> 00:08:51.329 satellite
NOTE Confidence: 0.9995117

00:08:51.950 --> 00:08:52.450 nodules
NOTE Confidence: 0.97420245

00:08:53.070 --> 00:08:54.589 at the periphery of the
NOTE Confidence: 0.97420245

00:08:54.589 --> 00:08:56.350 main tumor should not be
NOTE Confidence: 0.97420245

00:08:56.350 --> 00:08:57.250 over interpreted
NOTE Confidence: 0.9723511

00:08:58.125 --> 00:08:59.745 as indicative of malignancy.
NOTE Confidence: 0.9916295

00:09:00.125 --> 00:09:01.485 So you can find the
NOTE Confidence: 0.9916295

00:09:01.485 --> 00:09:02.545 smaller nodules
NOTE Confidence: 0.958374

00:09:03.005 --> 00:09:04.125 at the periphery of the
NOTE Confidence: 0.958374

00:09:04.125 --> 00:09:05.645 tumor. This is a tumor
NOTE Confidence: 0.958374

00:09:05.645 --> 00:09:06.545 that is
NOTE Confidence: 0.9958008

00:09:07.804 --> 00:09:09.585 composed of two cell layers
NOTE Confidence: 0.87927365

00:09:11.100 --> 00:09:13.500 forming tightly just opposed to
NOTE Confidence: 0.87927365

00:09:13.500 --> 00:09:15.120 small glands. So the epithelial

NOTE Confidence: 0.87927365

00:09:15.180 --> 00:09:17.020 cells align the glands. The

NOTE Confidence: 0.87927365

00:09:17.020 --> 00:09:19.100 my epithelial cells form the

NOTE Confidence: 0.87927365

00:09:19.100 --> 00:09:21.280 outer cell layer. The epithelium

NOTE Confidence: 0.87927365

00:09:21.420 --> 00:09:23.455 often has apocrine feature, may

NOTE Confidence: 0.87927365

00:09:23.455 --> 00:09:25.554 show focal sebaceous or squamous

NOTE Confidence: 0.87927365

00:09:25.615 --> 00:09:26.115 metaplasia.

NOTE Confidence: 0.97699904

00:09:26.815 --> 00:09:29.155 Focal myxoid stroma is possible.

NOTE Confidence: 0.97699904

00:09:29.215 --> 00:09:30.575 Actually, we saw a case

NOTE Confidence: 0.97699904

00:09:30.575 --> 00:09:31.075 today,

NOTE Confidence: 0.9857178

00:09:31.535 --> 00:09:32.195 this morning,

NOTE Confidence: 0.9983724

00:09:32.575 --> 00:09:33.795 that had extensive

NOTE Confidence: 0.99576825

00:09:34.255 --> 00:09:34.755 myxoid

NOTE Confidence: 0.9785156

00:09:35.135 --> 00:09:35.635 stroma

NOTE Confidence: 0.9168701

00:09:36.069 --> 00:09:37.690 and almost mimicked pleomorphic

NOTE Confidence: 0.9035718

00:09:38.230 --> 00:09:39.990 adenoma. And that was actually

NOTE Confidence: 0.9035718

00:09:39.990 --> 00:09:42.250 the differential diagnosis, but was
NOTE Confidence: 0.9035718

00:09:42.389 --> 00:09:43.129 in adenomyoepithelioma.
NOTE Confidence: 0.96377563

00:09:43.910 --> 00:09:45.429 The my epithelial cells are
NOTE Confidence: 0.96377563

00:09:45.429 --> 00:09:46.569 actually the most
NOTE Confidence: 0.96391547

00:09:47.190 --> 00:09:49.665 important cells in another myepithelioma,
NOTE Confidence: 0.96391547

00:09:49.964 --> 00:09:50.925 and they can have a
NOTE Confidence: 0.96391547

00:09:50.925 --> 00:09:52.225 variety of morphologic
NOTE Confidence: 0.9199219

00:09:53.324 --> 00:09:53.824 appearances,
NOTE Confidence: 0.75683594

00:09:54.204 --> 00:09:54.704 clears
NOTE Confidence: 0.9111654

00:09:55.245 --> 00:09:56.944 glycogen rich cytoplasm,
NOTE Confidence: 0.9066162

00:09:57.804 --> 00:10:00.045 spindle so prominent that they
NOTE Confidence: 0.9066162

00:10:00.045 --> 00:10:01.504 can mask the,
NOTE Confidence: 0.94782364

00:10:02.040 --> 00:10:04.620 glandular component, can look myoid
NOTE Confidence: 0.94782364

00:10:04.760 --> 00:10:05.580 or plasmacytoid.
NOTE Confidence: 0.9614936

00:10:07.000 --> 00:10:09.260 Adenomy epithelioma was first described
NOTE Confidence: 0.9614936

00:10:09.480 --> 00:10:11.820 in nineteen seventy by Herwig

NOTE Confidence: 0.9614936
00:10:12.040 --> 00:10:13.900 Hamper, a very stern looking
NOTE Confidence: 0.9759928
00:10:14.605 --> 00:10:15.505 German pathologist.
NOTE Confidence: 0.8516846
00:10:16.125 --> 00:10:16.785 Other pathologists
NOTE Confidence: 0.8359049
00:10:17.245 --> 00:10:19.585 wrote about adenomy epithelial lesions
NOTE Confidence: 0.98136395
00:10:20.285 --> 00:10:21.184 in the late,
NOTE Confidence: 0.95442706
00:10:22.285 --> 00:10:22.785 eighties,
NOTE Confidence: 0.7758789
00:10:23.325 --> 00:10:24.145 early nineties.
NOTE Confidence: 0.95278203
00:10:24.525 --> 00:10:25.645 But the first mention of
NOTE Confidence: 0.95278203
00:10:25.645 --> 00:10:26.625 adenomy epithelioma
NOTE Confidence: 0.981665
00:10:27.510 --> 00:10:29.350 was only in the third
NOTE Confidence: 0.981665
00:10:29.350 --> 00:10:31.850 edition of the WHO classification,
NOTE Confidence: 0.948622
00:10:33.429 --> 00:10:35.190 blue book in two thousand
NOTE Confidence: 0.948622
00:10:35.190 --> 00:10:36.309 and three where it was
NOTE Confidence: 0.948622
00:10:36.309 --> 00:10:37.910 included in the chapter on
NOTE Confidence: 0.948622
00:10:37.910 --> 00:10:39.290 my epithelial tumors.
NOTE Confidence: 0.9386974

00:10:39.765 --> 00:10:41.045 In the fourth edition, it
NOTE Confidence: 0.9386974

00:10:41.045 --> 00:10:42.885 had a dedicated chapter but
NOTE Confidence: 0.9386974

00:10:42.885 --> 00:10:44.184 both adenomyopiteloma
NOTE Confidence: 0.97802734

00:10:44.885 --> 00:10:45.545 and malignant
NOTE Confidence: 0.99497765

00:10:46.245 --> 00:10:46.745 adenomyopiteloma
NOTE Confidence: 0.8705008

00:10:47.525 --> 00:10:48.725 or as it was called,
NOTE Confidence: 0.8705008

00:10:48.725 --> 00:10:49.225 adenomyopiteloma
NOTE Confidence: 0.99121094

00:10:49.845 --> 00:10:50.505 with carcinoma
NOTE Confidence: 0.9370931

00:10:50.965 --> 00:10:53.145 were described together in just
NOTE Confidence: 0.9370931

00:10:53.285 --> 00:10:53.785 one
NOTE Confidence: 0.97946507

00:10:54.260 --> 00:10:55.700 chapter, and it was difficult
NOTE Confidence: 0.97946507

00:10:55.700 --> 00:10:56.839 to keep them apart.
NOTE Confidence: 0.91691893

00:10:57.380 --> 00:10:58.580 In the ninth in the
NOTE Confidence: 0.91691893

00:10:58.580 --> 00:11:00.520 fifth edition two thousand nineteen,
NOTE Confidence: 0.98947483

00:11:00.980 --> 00:11:02.580 they were separated. Each one
NOTE Confidence: 0.98947483

00:11:02.580 --> 00:11:03.960 gets its own chapter.

NOTE Confidence: 0.9221802
00:11:04.339 --> 00:11:05.399 Adenomy epithelioma
NOTE Confidence: 0.97908765
00:11:05.940 --> 00:11:08.715 is classified as classic adenomyopathyloma.
NOTE Confidence: 0.97822493
00:11:09.415 --> 00:11:11.255 It's recognized that it can
NOTE Confidence: 0.97822493
00:11:11.255 --> 00:11:13.335 be mitotically active and difficult
NOTE Confidence: 0.97822493
00:11:13.335 --> 00:11:15.515 to distinguish from, a malignant
NOTE Confidence: 0.97822493
00:11:15.735 --> 00:11:16.235 adenomyopathyloma.
NOTE Confidence: 0.9647624
00:11:17.335 --> 00:11:18.615 And also that there are
NOTE Confidence: 0.9647624
00:11:18.615 --> 00:11:20.190 reports that it can be
NOTE Confidence: 0.9647624
00:11:20.429 --> 00:11:21.570 occasionally metastatic
NOTE Confidence: 0.93881834
00:11:22.030 --> 00:11:23.650 even though it looks totally,
NOTE Confidence: 0.96447754
00:11:24.910 --> 00:11:25.970 benign appearing.
NOTE Confidence: 0.9614258
00:11:26.350 --> 00:11:26.850 And
NOTE Confidence: 0.946757
00:11:27.309 --> 00:11:29.150 it was suggested that maybe
NOTE Confidence: 0.946757
00:11:29.150 --> 00:11:30.429 it should be regarded as
NOTE Confidence: 0.946757
00:11:30.429 --> 00:11:32.210 a neoplasm of low malignant
NOTE Confidence: 0.946757

00:11:32.510 --> 00:11:33.010 potential.
NOTE Confidence: 0.9505932

00:11:33.485 --> 00:11:34.945 For malignant adenomyepithelioma,
NOTE Confidence: 0.9775146

00:11:35.644 --> 00:11:37.584 it was defined as adenomyepithelioma
NOTE Confidence: 0.99837244

00:11:38.285 --> 00:11:39.184 with carcinoma.
NOTE Confidence: 0.907959

00:11:40.285 --> 00:11:41.884 The malignancy could arise from
NOTE Confidence: 0.907959

00:11:41.884 --> 00:11:43.824 epithelium, my epithelial or
NOTE Confidence: 0.9769287

00:11:44.365 --> 00:11:45.184 both components.
NOTE Confidence: 0.9957953

00:11:45.740 --> 00:11:47.339 And if both components were
NOTE Confidence: 0.9957953

00:11:47.339 --> 00:11:47.839 malignant,
NOTE Confidence: 0.9543096

00:11:48.300 --> 00:11:49.660 one could use the term
NOTE Confidence: 0.9543096

00:11:49.660 --> 00:11:51.519 epithelial my epithelial carcinoma.
NOTE Confidence: 0.9650391

00:11:52.779 --> 00:11:54.879 There was also information about,
NOTE Confidence: 0.9843861

00:11:55.259 --> 00:11:57.420 the molecular activation. I'll come
NOTE Confidence: 0.9843861

00:11:57.420 --> 00:11:58.884 back to that later. And
NOTE Confidence: 0.9843861

00:11:58.884 --> 00:12:00.725 it was indicated that staging
NOTE Confidence: 0.9843861

00:12:00.725 --> 00:12:02.165 should be according to the

NOTE Confidence: 0.9843861
00:12:02.165 --> 00:12:03.304 invasive component.
NOTE Confidence: 0.8992587
00:12:03.925 --> 00:12:05.845 Now all these diagnostic criteria
NOTE Confidence: 0.8992587
00:12:05.845 --> 00:12:07.545 in the fifth edition were
NOTE Confidence: 0.8992587
00:12:07.764 --> 00:12:08.264 interesting,
NOTE Confidence: 0.990332
00:12:08.565 --> 00:12:11.144 but nothing was precisely specified.
NOTE Confidence: 0.91729736
00:12:12.059 --> 00:12:13.340 And really how did we
NOTE Confidence: 0.91729736
00:12:13.340 --> 00:12:14.320 go from adenomyopathy
NOTE Confidence: 0.7904053
00:12:14.860 --> 00:12:16.480 to a malignant adenomyopathy?
NOTE Confidence: 0.9752645
00:12:17.179 --> 00:12:18.559 There was a missing link
NOTE Confidence: 0.9752645
00:12:18.860 --> 00:12:20.559 of atypical adenomyopathy.
NOTE Confidence: 0.91076934
00:12:21.980 --> 00:12:23.760 A group led by Doctor.
NOTE Confidence: 0.91076934
00:12:23.820 --> 00:12:25.525 Ima Dragaka, a very famous
NOTE Confidence: 0.91076934
00:12:25.525 --> 00:12:27.705 and very productive breast pathologist,
NOTE Confidence: 0.98095703
00:12:28.645 --> 00:12:29.145 proposed
NOTE Confidence: 0.9913737
00:12:29.525 --> 00:12:30.425 a new classification
NOTE Confidence: 0.9716797

00:12:30.885 --> 00:12:32.825 in twenty twenty one where
NOTE Confidence: 0.9716797

00:12:33.125 --> 00:12:33.865 they classified
NOTE Confidence: 0.85650635

00:12:34.245 --> 00:12:36.905 adenomyopathy leoma into benign, atypical
NOTE Confidence: 0.85650635

00:12:37.125 --> 00:12:37.865 and malignant,
NOTE Confidence: 0.9215495

00:12:38.325 --> 00:12:39.545 including a malignant
NOTE Confidence: 0.96655273

00:12:40.165 --> 00:12:40.825 in situ
NOTE Confidence: 0.89208984

00:12:41.579 --> 00:12:42.800 and invasive
NOTE Confidence: 0.6213379

00:12:45.339 --> 00:12:46.639 carcinoma arising
NOTE Confidence: 0.9427084

00:12:47.019 --> 00:12:47.759 in adenomyopithelioma.
NOTE Confidence: 0.9211426

00:12:50.059 --> 00:12:50.959 This classification
NOTE Confidence: 0.9846733

00:12:51.500 --> 00:12:54.059 actually separated nicely atypical and
NOTE Confidence: 0.9846733

00:12:54.059 --> 00:12:54.559 malignant
NOTE Confidence: 0.9282532

00:12:55.385 --> 00:12:57.645 and actually provided the cutoff
NOTE Confidence: 0.9282532

00:12:57.785 --> 00:13:00.025 for mitotic activity that the
NOTE Confidence: 0.9282532

00:13:00.025 --> 00:13:02.205 author suggested should be only
NOTE Confidence: 0.9282532

00:13:02.505 --> 00:13:04.205 in the my epithelial cells.

NOTE Confidence: 0.9942627
00:13:04.985 --> 00:13:07.545 We thought very hard about
NOTE Confidence: 0.9942627
00:13:07.545 --> 00:13:08.925 adopting this classification
NOTE Confidence: 0.8817546
00:13:10.184 --> 00:13:11.779 for in the sixth edition
NOTE Confidence: 0.8817546
00:13:11.839 --> 00:13:13.459 of the WHO book,
NOTE Confidence: 0.8095703
00:13:15.040 --> 00:13:15.519 but,
NOTE Confidence: 0.87438965
00:13:16.160 --> 00:13:17.040 did not,
NOTE Confidence: 0.99902344
00:13:17.519 --> 00:13:18.019 eventually
NOTE Confidence: 0.9958225
00:13:18.399 --> 00:13:19.920 decided that there was not
NOTE Confidence: 0.9958225
00:13:19.920 --> 00:13:21.779 enough evidence to support
NOTE Confidence: 0.99333495
00:13:22.160 --> 00:13:23.380 the use of a classification
NOTE Confidence: 0.99333495
00:13:23.679 --> 00:13:25.300 that was not yet validated.
NOTE Confidence: 0.9701538
00:13:26.065 --> 00:13:27.185 And so it has,
NOTE Confidence: 0.9657593
00:13:28.385 --> 00:13:29.845 we haven't changed anything.
NOTE Confidence: 0.9107782
00:13:30.385 --> 00:13:32.165 And we still have classic
NOTE Confidence: 0.9107782
00:13:32.385 --> 00:13:32.885 adenomyopiteloma
NOTE Confidence: 0.9975586

00:13:33.825 --> 00:13:35.445 and malignant adenomyopiteloma.
NOTE Confidence: 0.9960124

00:13:36.385 --> 00:13:37.985 However, the classic is now
NOTE Confidence: 0.9960124

00:13:37.985 --> 00:13:38.485 subdivided
NOTE Confidence: 0.9043579

00:13:38.865 --> 00:13:40.805 into benign, that is,
NOTE Confidence: 0.92633927

00:13:41.120 --> 00:13:42.899 has no atypia, no necrosis
NOTE Confidence: 0.92633927

00:13:43.199 --> 00:13:44.399 up to one point five
NOTE Confidence: 0.92633927

00:13:44.399 --> 00:13:46.420 mitosis per square millimeter
NOTE Confidence: 0.9387556

00:13:46.880 --> 00:13:48.240 or three in ten high
NOTE Confidence: 0.9387556

00:13:48.240 --> 00:13:49.139 power fields.
NOTE Confidence: 0.94714355

00:13:49.600 --> 00:13:50.000 And then,
NOTE Confidence: 0.89438075

00:13:50.880 --> 00:13:52.579 there is an atypical adenomyepithelioma
NOTE Confidence: 0.9307799

00:13:53.279 --> 00:13:54.855 that will have mild to
NOTE Confidence: 0.9307799

00:13:54.855 --> 00:13:57.095 moderate atypia in epithelium, my
NOTE Confidence: 0.9307799

00:13:57.095 --> 00:13:58.635 epithelium or both.
NOTE Confidence: 0.9681125

00:13:59.015 --> 00:14:00.934 Can have more mitosis up
NOTE Confidence: 0.9681125

00:14:00.934 --> 00:14:02.054 to two point five per

NOTE Confidence: 0.9681125
00:14:02.054 --> 00:14:02.955 square millimeters.
NOTE Confidence: 0.9884033
00:14:03.655 --> 00:14:05.355 Can have focal necrosis.
NOTE Confidence: 0.9261068
00:14:05.815 --> 00:14:07.515 Can also have a substantial
NOTE Confidence: 0.9261068
00:14:07.655 --> 00:14:08.795 epithelial atypia
NOTE Confidence: 0.92479426
00:14:09.320 --> 00:14:10.840 in so much that you
NOTE Confidence: 0.92479426
00:14:10.840 --> 00:14:13.580 can diagnose DCIS in adenoma
NOTE Confidence: 0.92479426
00:14:13.800 --> 00:14:14.300 epithelioma.
NOTE Confidence: 0.9703559
00:14:14.679 --> 00:14:16.620 Our recommendation has been that
NOTE Confidence: 0.9703559
00:14:16.920 --> 00:14:18.200 you should be reported as
NOTE Confidence: 0.9703559
00:14:18.200 --> 00:14:20.060 such and managed as DCIS.
NOTE Confidence: 0.95269364
00:14:20.920 --> 00:14:22.280 And there are also some
NOTE Confidence: 0.95269364
00:14:22.280 --> 00:14:24.540 rare reports of atypical AME
NOTE Confidence: 0.91955566
00:14:25.535 --> 00:14:27.235 developing lymph node metastasis.
NOTE Confidence: 0.9712089
00:14:27.935 --> 00:14:29.375 But at this point, there
NOTE Confidence: 0.9712089
00:14:29.375 --> 00:14:31.375 is no routine recommendation for
NOTE Confidence: 0.9712089

00:14:31.375 --> 00:14:32.995 sentinel lymph node biopsy.
NOTE Confidence: 0.9693082

00:14:33.454 --> 00:14:34.574 Here is an example of
NOTE Confidence: 0.9693082

00:14:34.574 --> 00:14:35.875 an atypical adenomyepithelioma
NOTE Confidence: 0.9475542

00:14:36.735 --> 00:14:38.435 with mild to moderate atypia
NOTE Confidence: 0.9475542

00:14:38.720 --> 00:14:40.880 in epithelium, my epithelium or
NOTE Confidence: 0.9475542

00:14:40.880 --> 00:14:41.380 both.
NOTE Confidence: 0.9364537

00:14:41.920 --> 00:14:43.360 And also it has been
NOTE Confidence: 0.9364537

00:14:43.360 --> 00:14:44.980 noted that, adenomyopiteloma
NOTE Confidence: 0.91572267

00:14:45.680 --> 00:14:48.020 have an unusual staining pattern.
NOTE Confidence: 0.9777832

00:14:48.640 --> 00:14:50.260 High molecular weight cytokeratin
NOTE Confidence: 0.9300673

00:14:50.640 --> 00:14:52.260 will stain, paradoxically,
NOTE Confidence: 0.9499201

00:14:53.345 --> 00:14:55.265 the luminal cells of the
NOTE Confidence: 0.9499201

00:14:55.265 --> 00:14:57.285 gland and not the myoepithelial
NOTE Confidence: 0.9499201

00:14:57.505 --> 00:14:58.005 cells
NOTE Confidence: 0.8697917

00:14:58.305 --> 00:14:59.205 while the myoepithelial
NOTE Confidence: 0.9577261

00:14:59.585 --> 00:15:02.245 markers can stain variably different

NOTE Confidence: 0.9577261
00:15:02.305 --> 00:15:04.465 parts of the tumor that
NOTE Confidence: 0.9577261
00:15:04.465 --> 00:15:06.165 nonetheless look myoepithelial.
NOTE Confidence: 0.99609375
00:15:06.705 --> 00:15:08.480 So there is a discrepancy
NOTE Confidence: 0.99609375
00:15:08.779 --> 00:15:09.279 there.
NOTE Confidence: 0.9528972
00:15:09.820 --> 00:15:11.040 If we have an atypical
NOTE Confidence: 0.9399312
00:15:11.660 --> 00:15:13.420 adenomyopathy loma, how do we
NOTE Confidence: 0.9399312
00:15:13.420 --> 00:15:15.360 separate from a malignant adenomyopathy
NOTE Confidence: 0.93992704
00:15:15.740 --> 00:15:17.020 loma? You can still find
NOTE Confidence: 0.93992704
00:15:17.020 --> 00:15:18.459 a typical, if you find
NOTE Confidence: 0.93992704
00:15:18.459 --> 00:15:19.980 a typical mitosis in an
NOTE Confidence: 0.93992704
00:15:19.980 --> 00:15:21.040 atypical adenomyopathy
NOTE Confidence: 0.92132413
00:15:21.420 --> 00:15:23.095 loma, of course, there is
NOTE Confidence: 0.92132413
00:15:23.095 --> 00:15:24.555 a high level of suspicion
NOTE Confidence: 0.92132413
00:15:24.695 --> 00:15:25.995 for malignant transformation.
NOTE Confidence: 0.80228674
00:15:27.015 --> 00:15:28.235 But, mitotically
NOTE Confidence: 0.9545259

00:15:28.615 --> 00:15:30.775 active adenomy epithelioma that have
NOTE Confidence: 0.9545259

00:15:30.775 --> 00:15:33.015 some also cytological tibia can
NOTE Confidence: 0.9545259

00:15:33.015 --> 00:15:34.635 be difficult to separate
NOTE Confidence: 0.7155762

00:15:35.255 --> 00:15:35.575 still,
NOTE Confidence: 0.86572266

00:15:36.535 --> 00:15:37.595 with a new criteria
NOTE Confidence: 0.97546387

00:15:38.500 --> 00:15:39.860 difficult to separate from a
NOTE Confidence: 0.97546387

00:15:39.860 --> 00:15:41.480 malignant adenomy epithelioma.
NOTE Confidence: 0.95290124

00:15:42.100 --> 00:15:42.980 And if you have an
NOTE Confidence: 0.95290124

00:15:42.980 --> 00:15:45.220 AME with mild to moderate
NOTE Confidence: 0.95290124

00:15:45.220 --> 00:15:47.459 cytological tpia or as many
NOTE Confidence: 0.95290124

00:15:47.459 --> 00:15:48.920 as two point five mitosis
NOTE Confidence: 0.97439235

00:15:49.459 --> 00:15:50.519 per square millimeter,
NOTE Confidence: 0.97636414

00:15:51.285 --> 00:15:53.204 then, you don't have other
NOTE Confidence: 0.97636414

00:15:53.204 --> 00:15:54.425 features of malignancy,
NOTE Confidence: 0.9690647

00:15:55.204 --> 00:15:56.245 then you can still call
NOTE Confidence: 0.9690647

00:15:56.245 --> 00:15:58.745 it atypical adenoma epithelioma.

NOTE Confidence: 0.93197197

00:15:59.204 --> 00:16:01.204 The main differential diagnosis of

NOTE Confidence: 0.93197197

00:16:01.204 --> 00:16:02.264 adenoma epithelioma

NOTE Confidence: 0.9002957

00:16:02.565 --> 00:16:04.584 listed here, touch on two.

NOTE Confidence: 0.9002957

00:16:04.830 --> 00:16:06.610 One is intraductal papilloma

NOTE Confidence: 0.75219727

00:16:06.990 --> 00:16:07.890 that morphologically

NOTE Confidence: 0.98482054

00:16:08.350 --> 00:16:10.610 looks very similar to adenomyopiteloma,

NOTE Confidence: 0.9731794

00:16:11.390 --> 00:16:13.490 can have areas with prominent

NOTE Confidence: 0.9731794

00:16:13.630 --> 00:16:14.290 my epithelial

NOTE Confidence: 0.76123047

00:16:15.070 --> 00:16:16.050 cells very

NOTE Confidence: 0.91711426

00:16:17.505 --> 00:16:19.445 evident throughout the glance

NOTE Confidence: 0.89091796

00:16:20.065 --> 00:16:21.985 but it's definitely in an

NOTE Confidence: 0.89091796

00:16:21.985 --> 00:16:23.925 excision specimen will be entirely

NOTE Confidence: 0.89091796

00:16:23.985 --> 00:16:25.845 confined within a duct while

NOTE Confidence: 0.9890408

00:16:26.385 --> 00:16:27.665 AME is going to be

NOTE Confidence: 0.9890408

00:16:27.665 --> 00:16:29.205 a more solid proliferation

NOTE Confidence: 0.9053548

00:16:29.585 --> 00:16:31.285 within nodular proliferation
NOTE Confidence: 0.9494629

00:16:32.040 --> 00:16:32.540 within,
NOTE Confidence: 0.9788086

00:16:33.000 --> 00:16:34.300 the breast parenchyma.
NOTE Confidence: 0.9839493

00:16:35.160 --> 00:16:36.839 Nonetheless, it can be difficult
NOTE Confidence: 0.9839493

00:16:36.839 --> 00:16:38.120 to separate the two in
NOTE Confidence: 0.9839493

00:16:38.120 --> 00:16:39.100 a core biopsy.
NOTE Confidence: 0.8814812

00:16:39.720 --> 00:16:41.420 And, in the core biopsy,
NOTE Confidence: 0.8814812

00:16:41.480 --> 00:16:43.580 actually this differential had substantial
NOTE Confidence: 0.8814812

00:16:43.880 --> 00:16:46.140 management implication. At our institution,
NOTE Confidence: 0.8814812

00:16:46.279 --> 00:16:48.235 for example, we no longer
NOTE Confidence: 0.8814812

00:16:48.235 --> 00:16:50.575 excise red path concordant papillomas,
NOTE Confidence: 0.7610514

00:16:51.355 --> 00:16:53.375 diagnose on cord, needle biopsy,
NOTE Confidence: 0.9739222

00:16:54.075 --> 00:16:56.495 while a classic AME always
NOTE Confidence: 0.9739222

00:16:56.555 --> 00:16:57.855 needs to be excised.
NOTE Confidence: 0.9879286

00:16:59.115 --> 00:17:01.115 The recommendation is to look
NOTE Confidence: 0.9879286

00:17:01.115 --> 00:17:02.095 at the my epithelial

NOTE Confidence: 0.79785156

00:17:02.395 --> 00:17:02.820 cells.

NOTE Confidence: 0.88220793

00:17:03.220 --> 00:17:04.520 If they are more numerous,

NOTE Confidence: 0.88220793

00:17:04.660 --> 00:17:05.880 plumper, larger,

NOTE Confidence: 0.939326

00:17:06.260 --> 00:17:07.619 then you're dealing with an

NOTE Confidence: 0.939326

00:17:07.619 --> 00:17:08.119 adenomyoepithelioma

NOTE Confidence: 0.76262206

00:17:08.980 --> 00:17:10.920 rather than in interductal papilloma

NOTE Confidence: 0.84033203

00:17:11.700 --> 00:17:13.060 or a normal lobules or

NOTE Confidence: 0.84033203

00:17:13.060 --> 00:17:14.040 nodular adenosis.

NOTE Confidence: 0.91203964

00:17:14.420 --> 00:17:15.540 So this is easier said

NOTE Confidence: 0.91203964

00:17:15.540 --> 00:17:17.220 than done. And I say,

NOTE Confidence: 0.91203964

00:17:17.220 --> 00:17:18.520 I still find it

NOTE Confidence: 0.99902344

00:17:18.955 --> 00:17:19.775 quite challenging.

NOTE Confidence: 0.9028989

00:17:20.234 --> 00:17:22.155 Yeah. The differential is a

NOTE Confidence: 0.9028989

00:17:22.155 --> 00:17:24.875 typical AME with adenoid cystic

NOTE Confidence: 0.9028989

00:17:24.875 --> 00:17:26.895 carcinoma of conventional morphology

NOTE Confidence: 0.8850369

00:17:27.435 --> 00:17:29.055 because you can still have
NOTE Confidence: 0.8850369

00:17:29.115 --> 00:17:30.734 CD one seventeen positivity,
NOTE Confidence: 0.9046224

00:17:31.500 --> 00:17:32.720 focal MIB positivity.
NOTE Confidence: 0.99731445

00:17:33.100 --> 00:17:34.859 However, there is no MIB
NOTE Confidence: 0.99731445

00:17:34.859 --> 00:17:35.359 amplification
NOTE Confidence: 0.9980469

00:17:35.740 --> 00:17:36.720 in these tumors
NOTE Confidence: 0.75341797

00:17:37.260 --> 00:17:38.400 and in particular
NOTE Confidence: 0.7414551

00:17:38.780 --> 00:17:39.520 this one,
NOTE Confidence: 0.9237976

00:17:40.460 --> 00:17:41.920 this tumor that looks,
NOTE Confidence: 0.9887463

00:17:42.380 --> 00:17:44.800 could be interpreted as adenoid
NOTE Confidence: 0.9887463

00:17:44.859 --> 00:17:45.795 cystic carcinoma
NOTE Confidence: 0.9655762

00:17:46.175 --> 00:17:47.315 actually harbored
NOTE Confidence: 0.93652344

00:17:47.855 --> 00:17:48.595 a typical,
NOTE Confidence: 0.774943

00:17:49.455 --> 00:17:50.435 HGAS Q61R
NOTE Confidence: 0.99609375

00:17:51.135 --> 00:17:51.635 mutation
NOTE Confidence: 0.9161891

00:17:52.095 --> 00:17:54.275 that is regarded as diagnostic

NOTE Confidence: 0.9161891
00:17:54.415 --> 00:17:56.175 of adenoma epithelioma. So a
NOTE Confidence: 0.9161891
00:17:56.175 --> 00:17:57.155 lot of overlap.
NOTE Confidence: 0.9294809
00:17:57.980 --> 00:17:59.900 And, but the staining for
NOTE Confidence: 0.9294809
00:17:59.900 --> 00:18:01.980 MIB tends to be very,
NOTE Confidence: 0.9294809
00:18:01.980 --> 00:18:03.600 very focal in
NOTE Confidence: 0.9573433
00:18:04.220 --> 00:18:06.140 AME. And, if you do
NOTE Confidence: 0.9573433
00:18:06.140 --> 00:18:06.640 molecular,
NOTE Confidence: 0.97541153
00:18:08.300 --> 00:18:09.740 study, you will not find
NOTE Confidence: 0.97541153
00:18:09.740 --> 00:18:10.560 MIB amplification.
NOTE Confidence: 0.9883423
00:18:11.994 --> 00:18:13.294 In terms of behavior,
NOTE Confidence: 0.95650905
00:18:13.595 --> 00:18:15.515 AME usually has a benign
NOTE Confidence: 0.95650905
00:18:15.515 --> 00:18:18.015 clinical course and surgical excision
NOTE Confidence: 0.95650905
00:18:18.075 --> 00:18:18.734 is curative.
NOTE Confidence: 0.8544705
00:18:19.195 --> 00:18:21.195 It may record locally if
NOTE Confidence: 0.8544705
00:18:21.195 --> 00:18:22.875 there are satellite nodules or
NOTE Confidence: 0.8544705

00:18:22.875 --> 00:18:25.455 a prominent intraductal papillary component.

NOTE Confidence: 0.9091339

00:18:26.950 --> 00:18:28.869 But, these are METs from

NOTE Confidence: 0.9091339

00:18:28.869 --> 00:18:30.630 an AME that didn't have

NOTE Confidence: 0.9091339

00:18:30.630 --> 00:18:32.630 any atypia or increased cell

NOTE Confidence: 0.9091339

00:18:32.630 --> 00:18:33.130 proliferation

NOTE Confidence: 0.9194336

00:18:33.509 --> 00:18:34.330 have been reported.

NOTE Confidence: 0.984933

00:18:35.109 --> 00:18:37.029 And, for that reason, the

NOTE Confidence: 0.984933

00:18:37.029 --> 00:18:38.250 WHO recommends

NOTE Confidence: 0.68892413

00:18:38.630 --> 00:18:40.490 that, classic AME

NOTE Confidence: 0.98654515

00:18:40.825 --> 00:18:43.165 is best regarded not truly

NOTE Confidence: 0.98654515

00:18:43.385 --> 00:18:44.845 as a benign entity

NOTE Confidence: 0.9148763

00:18:45.225 --> 00:18:47.165 but a neoplasm of uncertain

NOTE Confidence: 0.9148763

00:18:47.385 --> 00:18:48.525 malignant potential.

NOTE Confidence: 0.9727783

00:18:49.545 --> 00:18:51.565 For malignant adenoma epithelioma,

NOTE Confidence: 0.9788179

00:18:52.345 --> 00:18:54.585 it is defined as AME

NOTE Confidence: 0.9788179

00:18:54.585 --> 00:18:55.405 with carcinoma.

NOTE Confidence: 0.8650059

00:18:55.785 --> 00:18:56.990 And And again, the malignancy

NOTE Confidence: 0.8650059

00:18:57.210 --> 00:18:58.730 may arise from epithelium, my

NOTE Confidence: 0.8650059

00:18:58.730 --> 00:19:00.109 epithelium or both.

NOTE Confidence: 0.8611292

00:19:00.810 --> 00:19:01.770 It used to be called

NOTE Confidence: 0.8611292

00:19:01.770 --> 00:19:03.630 epithelio my epithelial carcinoma,

NOTE Confidence: 0.9849243

00:19:04.010 --> 00:19:05.790 not anymore. That terminology

NOTE Confidence: 0.9930013

00:19:06.170 --> 00:19:07.470 has been eliminated

NOTE Confidence: 0.9454956

00:19:07.850 --> 00:19:09.150 as well as adenomyepithelial

NOTE Confidence: 0.9845288

00:19:10.015 --> 00:19:11.855 carcinoma. You can call it

NOTE Confidence: 0.9845288

00:19:11.855 --> 00:19:13.715 AME with invasive carcinoma.

NOTE Confidence: 0.90983075

00:19:14.655 --> 00:19:15.554 In these cases,

NOTE Confidence: 0.9980469

00:19:15.934 --> 00:19:16.674 you should

NOTE Confidence: 0.8824158

00:19:16.975 --> 00:19:18.494 be still be able to

NOTE Confidence: 0.8824158

00:19:18.494 --> 00:19:19.875 recognize the underlying

NOTE Confidence: 0.99031574

00:19:20.655 --> 00:19:21.155 adenomyopithelial

NOTE Confidence: 0.9980469

00:19:21.934 --> 00:19:22.434 tumor
NOTE Confidence: 0.9534912

00:19:23.369 --> 00:19:25.290 on with in addition, there
NOTE Confidence: 0.9534912

00:19:25.290 --> 00:19:26.109 will be cytological
NOTE Confidence: 0.9671921

00:19:26.410 --> 00:19:28.890 tibia, mitosis, necrosis in the
NOTE Confidence: 0.9671921

00:19:28.890 --> 00:19:30.030 malignant component.
NOTE Confidence: 0.9324544

00:19:30.570 --> 00:19:31.790 When you have a malignant
NOTE Confidence: 0.9324544

00:19:31.850 --> 00:19:32.350 transformation
NOTE Confidence: 0.49047852

00:19:32.970 --> 00:19:33.470 predominantly
NOTE Confidence: 0.99816895

00:19:34.090 --> 00:19:35.630 in the epithelial component,
NOTE Confidence: 0.9617745

00:19:36.034 --> 00:19:37.734 you may get an invasive
NOTE Confidence: 0.9617745

00:19:37.875 --> 00:19:38.774 breast carcinoma
NOTE Confidence: 0.9237793

00:19:39.154 --> 00:19:40.434 of no special type or
NOTE Confidence: 0.9237793

00:19:40.434 --> 00:19:42.774 other special types including globular.
NOTE Confidence: 0.9925537

00:19:43.475 --> 00:19:44.934 If the malignant transformation
NOTE Confidence: 0.9158691

00:19:45.234 --> 00:19:47.494 affects the my epithelial component,
NOTE Confidence: 0.97239256

00:19:48.130 --> 00:19:50.049 then you have overgrowth of

NOTE Confidence: 0.97239256

00:19:50.049 --> 00:19:52.549 spindle epithelioid, my epithelial cells

NOTE Confidence: 0.77101237

00:19:52.929 --> 00:19:54.789 with nuclear atypia and mitosis.

NOTE Confidence: 0.9687195

00:19:55.809 --> 00:19:58.130 Not uncommonly, actually, the invasive

NOTE Confidence: 0.9687195

00:19:58.130 --> 00:19:59.669 carcinoma that arises

NOTE Confidence: 0.90478516

00:20:00.049 --> 00:20:00.549 in

NOTE Confidence: 0.96512854

00:20:00.895 --> 00:20:01.955 adenoma epithelioma

NOTE Confidence: 0.95665145

00:20:02.255 --> 00:20:02.994 is a metaplastic

NOTE Confidence: 0.9522569

00:20:03.375 --> 00:20:04.994 carcinoma. Spindle cell,

NOTE Confidence: 0.89193726

00:20:05.375 --> 00:20:07.395 squamous cell, logated adenosquamous

NOTE Confidence: 0.8322754

00:20:07.855 --> 00:20:08.915 matrix producing

NOTE Confidence: 0.9109497

00:20:09.375 --> 00:20:10.595 have all been reported.

NOTE Confidence: 0.8162842

00:20:11.455 --> 00:20:12.595 And in these cases,

NOTE Confidence: 0.9883161

00:20:13.070 --> 00:20:15.310 you should sample the tumor

NOTE Confidence: 0.9883161

00:20:15.310 --> 00:20:16.270 and see if you can

NOTE Confidence: 0.9883161

00:20:16.270 --> 00:20:18.290 identify an AME component.

NOTE Confidence: 0.9914175

00:20:19.070 --> 00:20:20.770 And, in terms of staging,
NOTE Confidence: 0.9914175

00:20:20.910 --> 00:20:22.750 you report the size of
NOTE Confidence: 0.9914175

00:20:22.750 --> 00:20:24.210 the invasive component.
NOTE Confidence: 0.8474847

00:20:25.005 --> 00:20:26.545 Here example of a metaplastic
NOTE Confidence: 0.8474847

00:20:26.685 --> 00:20:29.085 spindle cell carcinoma arising in
NOTE Confidence: 0.8474847

00:20:29.085 --> 00:20:30.385 an adenoma epithelioma.
NOTE Confidence: 0.8957764

00:20:31.085 --> 00:20:32.545 And here is a fibromatosis
NOTE Confidence: 0.9755818

00:20:33.085 --> 00:20:35.565 like carcinoma also arising in
NOTE Confidence: 0.9755818

00:20:35.565 --> 00:20:36.785 an adenoma epithelioma.
NOTE Confidence: 0.99576825

00:20:37.740 --> 00:20:38.720 From a genetic
NOTE Confidence: 0.8689941

00:20:39.820 --> 00:20:41.680 standpoint of view, these lesions,
NOTE Confidence: 0.96449

00:20:43.020 --> 00:20:44.700 they seem to vary depending
NOTE Confidence: 0.96449

00:20:44.700 --> 00:20:46.540 on the ER status. The
NOTE Confidence: 0.96449

00:20:46.540 --> 00:20:49.760 ER positive tumors, adenomy epithelioma,
NOTE Confidence: 0.96449

00:20:49.900 --> 00:20:51.040 tend to have PIK3CA
NOTE Confidence: 0.98046875

00:20:51.420 --> 00:20:52.160 or AKT1

NOTE Confidence: 0.9941406
00:20:53.225 --> 00:20:53.725 mutations
NOTE Confidence: 0.88689506
00:20:54.105 --> 00:20:56.525 similar to those, hotspot mutation
NOTE Confidence: 0.88689506
00:20:56.585 --> 00:20:57.885 you find in papillomas.
NOTE Confidence: 0.9358673
00:20:59.945 --> 00:21:02.185 While the ER negative or
NOTE Confidence: 0.9358673
00:21:02.185 --> 00:21:03.565 ER low adenomyopathy
NOTE Confidence: 0.8342285
00:21:03.945 --> 00:21:04.445 leomas
NOTE Confidence: 0.91385746
00:21:04.825 --> 00:21:06.445 tend to harbor an HRASQ61,
NOTE Confidence: 0.9580078
00:21:09.410 --> 00:21:09.910 mutation
NOTE Confidence: 0.9514567
00:21:10.369 --> 00:21:11.590 combined with PIK3CA
NOTE Confidence: 0.91155773
00:21:12.369 --> 00:21:13.990 and they may have also
NOTE Confidence: 0.91155773
00:21:14.130 --> 00:21:16.150 homozygous deletion of CDK
NOTE Confidence: 0.8383789
00:21:16.609 --> 00:21:17.109 N2A
NOTE Confidence: 0.94211155
00:21:17.730 --> 00:21:19.030 that encodes P16.
NOTE Confidence: 0.9859009
00:21:19.650 --> 00:21:21.815 And it seems that actually
NOTE Confidence: 0.9859009
00:21:21.955 --> 00:21:22.855 this is how
NOTE Confidence: 0.9175944

00:21:24.514 --> 00:21:25.955 from this second group of
NOTE Confidence: 0.9175944

00:21:25.955 --> 00:21:28.274 ER negative tumors, we have
NOTE Confidence: 0.9175944

00:21:28.274 --> 00:21:30.054 the development of the malignant
NOTE Confidence: 0.94846594

00:21:30.434 --> 00:21:31.414 adenoma epithelioma
NOTE Confidence: 0.99125534

00:21:31.955 --> 00:21:33.635 that are usually triple negative
NOTE Confidence: 0.99125534

00:21:33.635 --> 00:21:35.174 and harbor the same molecular
NOTE Confidence: 0.99125534

00:21:35.394 --> 00:21:35.894 alteration
NOTE Confidence: 0.95784503

00:21:37.649 --> 00:21:38.390 as the atypical
NOTE Confidence: 0.9762614

00:21:38.929 --> 00:21:40.869 ER negative adenomy epithelioma.
NOTE Confidence: 0.99609375

00:21:42.130 --> 00:21:42.789 Other mutations
NOTE Confidence: 0.9338078

00:21:43.330 --> 00:21:45.090 in HRSA have also been
NOTE Confidence: 0.9338078

00:21:45.090 --> 00:21:46.929 reported both in atypical and
NOTE Confidence: 0.9338078

00:21:46.929 --> 00:21:48.549 malignant adenomy epithelioma.
NOTE Confidence: 0.994043

00:21:48.965 --> 00:21:50.505 There is only one case
NOTE Confidence: 0.9713033

00:21:50.885 --> 00:21:52.085 where the same gain of
NOTE Confidence: 0.9713033

00:21:52.085 --> 00:21:53.145 function of AKT1

NOTE Confidence: 0.99869794
00:21:53.445 --> 00:21:54.825 variant was found
NOTE Confidence: 0.9602661
00:21:55.125 --> 00:21:56.505 in AME and malignant
NOTE Confidence: 0.97237724
00:21:56.885 --> 00:21:58.244 AME. So this would be
NOTE Confidence: 0.97237724
00:21:58.244 --> 00:21:58.984 an exception.
NOTE Confidence: 0.9618417
00:21:59.765 --> 00:22:02.005 In general, AKT1 mutation are
NOTE Confidence: 0.9618417
00:22:02.005 --> 00:22:03.385 more in keeping with
NOTE Confidence: 0.99609375
00:22:04.109 --> 00:22:04.609 benign
NOTE Confidence: 0.8754069
00:22:05.070 --> 00:22:06.450 ER positive adenomyopiteloma
NOTE Confidence: 0.9300008
00:22:07.390 --> 00:22:09.630 or intraductal papilloma. Maybe the
NOTE Confidence: 0.9300008
00:22:09.630 --> 00:22:10.930 two are the same thing.
NOTE Confidence: 0.9836426
00:22:11.310 --> 00:22:11.710 Right?
NOTE Confidence: 0.9770508
00:22:12.190 --> 00:22:12.830 And then,
NOTE Confidence: 0.9161377
00:22:13.150 --> 00:22:14.450 p fifty three mutations
NOTE Confidence: 0.8610908
00:22:15.150 --> 00:22:16.910 are generally not observed. There
NOTE Confidence: 0.8610908
00:22:16.910 --> 00:22:18.530 is only one case report.
NOTE Confidence: 0.8610908

00:22:18.784 --> 00:22:20.225 And there are no BB
NOTE Confidence: 0.8610908

00:22:20.225 --> 00:22:21.205 two u amplification,
NOTE Confidence: 0.9841797

00:22:22.225 --> 00:22:23.445 at least in a series
NOTE Confidence: 0.95033485

00:22:23.744 --> 00:22:25.585 from our institution of forty
NOTE Confidence: 0.95033485

00:22:25.585 --> 00:22:26.244 two cases.
NOTE Confidence: 0.9342041

00:22:27.105 --> 00:22:29.024 And actually, if you have
NOTE Confidence: 0.9342041

00:22:29.265 --> 00:22:30.325 there is an immunoistochemical
NOTE Confidence: 0.84866333

00:22:32.880 --> 00:22:34.320 stain that can be used
NOTE Confidence: 0.84866333

00:22:34.320 --> 00:22:36.000 to detect the HRS q
NOTE Confidence: 0.84866333

00:22:36.000 --> 00:22:36.820 sixty one
NOTE Confidence: 0.6300049

00:22:37.280 --> 00:22:38.100 R mutated
NOTE Confidence: 0.81933594

00:22:38.720 --> 00:22:39.780 altered protein
NOTE Confidence: 0.861883

00:22:40.400 --> 00:22:42.400 and it's positive only in
NOTE Confidence: 0.861883

00:22:42.400 --> 00:22:44.160 the tumor that harbor this
NOTE Confidence: 0.861883

00:22:44.160 --> 00:22:44.660 alteration
NOTE Confidence: 0.9432373

00:22:45.520 --> 00:22:46.260 and not,

NOTE Confidence: 0.9643888
00:22:47.965 --> 00:22:49.244 you know, it's negative only
NOTE Confidence: 0.9643888
00:22:49.244 --> 00:22:50.284 in the tumor with this
NOTE Confidence: 0.9643888
00:22:50.284 --> 00:22:50.784 alteration,
NOTE Confidence: 0.8701172
00:22:51.325 --> 00:22:52.304 well, it will,
NOTE Confidence: 0.86950684
00:22:53.325 --> 00:22:54.865 I am sorry. It's,
NOTE Confidence: 0.9457245
00:22:55.244 --> 00:22:57.325 it doesn't stain tumors that
NOTE Confidence: 0.9457245
00:22:57.325 --> 00:22:59.265 do not have the mutation,
NOTE Confidence: 0.9457245
00:22:59.325 --> 00:23:01.085 but it stains only the
NOTE Confidence: 0.9457245
00:23:01.085 --> 00:23:01.585 tumors
NOTE Confidence: 0.8459676
00:23:02.044 --> 00:23:03.060 that harbor this alteration. So
NOTE Confidence: 0.8459676
00:23:03.220 --> 00:23:05.060 alteration. So it has a
NOTE Confidence: 0.8459676
00:23:05.060 --> 00:23:06.200 possible diagnostic
NOTE Confidence: 0.9667155
00:23:06.740 --> 00:23:07.800 value, but it's
NOTE Confidence: 0.953125
00:23:08.100 --> 00:23:09.860 probably present in fifty to
NOTE Confidence: 0.953125
00:23:09.860 --> 00:23:11.880 sixty percent of, malignant
NOTE Confidence: 0.8190918

00:23:12.180 --> 00:23:12.680 adenomyopithelioma.
NOTE Confidence: 0.97202146

00:23:13.380 --> 00:23:15.560 So it's not that frequently,
NOTE Confidence: 0.99316406

00:23:16.580 --> 00:23:17.080 positive.
NOTE Confidence: 0.9987444

00:23:18.015 --> 00:23:20.015 The other entity that has
NOTE Confidence: 0.9987444

00:23:20.015 --> 00:23:20.755 been discussed
NOTE Confidence: 0.9530029

00:23:21.135 --> 00:23:23.395 and somewhat modified is encapsulated
NOTE Confidence: 0.9530029

00:23:23.615 --> 00:23:26.275 papillary carcinoma together with invasive
NOTE Confidence: 0.9530029

00:23:26.494 --> 00:23:27.555 papillary carcinoma.
NOTE Confidence: 0.938151

00:23:28.335 --> 00:23:31.055 Encapsulated papillary carcinoma typically occur
NOTE Confidence: 0.938151

00:23:31.055 --> 00:23:32.035 in postmenopausal
NOTE Confidence: 0.9304199

00:23:32.570 --> 00:23:34.410 women, usually in the seventh
NOTE Confidence: 0.9304199

00:23:34.410 --> 00:23:34.910 decade,
NOTE Confidence: 0.8845912

00:23:35.450 --> 00:23:36.730 and can present with a
NOTE Confidence: 0.8845912

00:23:36.730 --> 00:23:37.790 nipple discharge,
NOTE Confidence: 0.75061035

00:23:38.330 --> 00:23:40.670 typically forms this silk inscribed
NOTE Confidence: 0.75061035

00:23:40.890 --> 00:23:42.670 greater or subareolar mass

NOTE Confidence: 0.9670247
00:23:43.210 --> 00:23:44.910 that is solid and cystic,
NOTE Confidence: 0.95202637
00:23:45.770 --> 00:23:46.590 by ultrasound.
NOTE Confidence: 0.92163086
00:23:47.484 --> 00:23:49.404 And, it's characterized by the
NOTE Confidence: 0.92163086
00:23:49.404 --> 00:23:49.904 absence
NOTE Confidence: 0.9120206
00:23:50.284 --> 00:23:51.965 of my epithelial cells all
NOTE Confidence: 0.9120206
00:23:51.965 --> 00:23:53.885 throughout the tumor and most
NOTE Confidence: 0.9120206
00:23:53.885 --> 00:23:54.385 importantly,
NOTE Confidence: 0.8773833
00:23:54.845 --> 00:23:56.924 around the tumor at the
NOTE Confidence: 0.8773833
00:23:56.924 --> 00:23:58.924 interface with the normal breast
NOTE Confidence: 0.8773833
00:23:58.924 --> 00:24:00.559 cancer and chemo. Therefore,
NOTE Confidence: 0.97558594
00:24:00.859 --> 00:24:02.779 technically speaking, this is an
NOTE Confidence: 0.97558594
00:24:02.779 --> 00:24:04.700 invasive carcinoma but it has
NOTE Confidence: 0.97558594
00:24:04.700 --> 00:24:06.000 a very blunt
NOTE Confidence: 0.8092448
00:24:07.019 --> 00:24:08.159 front of invasion
NOTE Confidence: 0.9794922
00:24:09.100 --> 00:24:10.859 and clinically behaves in a
NOTE Confidence: 0.9794922

00:24:10.859 --> 00:24:11.359 very
NOTE Confidence: 0.9995117

00:24:11.899 --> 00:24:13.119 indolent manner.
NOTE Confidence: 0.9715867

00:24:13.545 --> 00:24:15.625 So to, it's important in
NOTE Confidence: 0.9715867

00:24:15.625 --> 00:24:17.485 these cases to sample extensively
NOTE Confidence: 0.9715867

00:24:17.785 --> 00:24:19.225 the periphery of the tumor
NOTE Confidence: 0.9715867

00:24:19.225 --> 00:24:20.505 with a rim of adjacent
NOTE Confidence: 0.9715867

00:24:20.505 --> 00:24:21.005 tissue
NOTE Confidence: 0.9824219

00:24:21.305 --> 00:24:23.165 because sometimes you may find
NOTE Confidence: 0.9812012

00:24:23.465 --> 00:24:26.205 outside the encapsulated papillary carcinoma
NOTE Confidence: 0.9812012

00:24:26.505 --> 00:24:27.165 an invasive,
NOTE Confidence: 0.91813153

00:24:27.820 --> 00:24:29.359 frankly invasive component,
NOTE Confidence: 0.98878986

00:24:29.900 --> 00:24:31.340 which is present in about
NOTE Confidence: 0.98878986

00:24:31.340 --> 00:24:32.940 twenty to sixty percent of
NOTE Confidence: 0.98878986

00:24:32.940 --> 00:24:33.600 the cases.
NOTE Confidence: 0.96240234

00:24:34.380 --> 00:24:36.480 Usually, the presence of invasion
NOTE Confidence: 0.96240234

00:24:36.619 --> 00:24:37.520 is unrelated

NOTE Confidence: 0.9820421
00:24:37.900 --> 00:24:39.100 to the size of the
NOTE Confidence: 0.9820421
00:24:39.100 --> 00:24:39.600 EPC,
NOTE Confidence: 0.9752424
00:24:40.205 --> 00:24:41.565 but the majority of these
NOTE Confidence: 0.9752424
00:24:41.565 --> 00:24:43.484 tumors, about seventy percent, are
NOTE Confidence: 0.9752424
00:24:43.484 --> 00:24:45.725 well differentiated invasive ductile. You
NOTE Confidence: 0.9752424
00:24:45.725 --> 00:24:46.705 can find also
NOTE Confidence: 0.943079
00:24:47.005 --> 00:24:49.005 other special subtypes such as
NOTE Confidence: 0.943079
00:24:49.005 --> 00:24:51.185 mucinous tubular, invasive cribriform.
NOTE Confidence: 0.95195603
00:24:51.645 --> 00:24:53.005 And the majority are going
NOTE Confidence: 0.95195603
00:24:53.005 --> 00:24:54.545 to be very small tumor,
NOTE Confidence: 0.95195603
00:24:54.685 --> 00:24:55.185 PT1,
NOTE Confidence: 0.9190267
00:24:57.010 --> 00:24:58.690 two PT one a or
NOTE Confidence: 0.9190267
00:24:58.690 --> 00:24:59.190 b,
NOTE Confidence: 0.9394531
00:24:59.890 --> 00:25:02.050 that are ER positive, HER2
NOTE Confidence: 0.9394531
00:25:02.050 --> 00:25:02.550 negative.
NOTE Confidence: 0.9850028

00:25:03.250 --> 00:25:04.369 Now if there is no
NOTE Confidence: 0.9850028

00:25:04.369 --> 00:25:05.270 frank invasion,
NOTE Confidence: 0.941755

00:25:06.690 --> 00:25:08.609 this tumor for many years
NOTE Confidence: 0.941755

00:25:08.609 --> 00:25:09.430 was actually
NOTE Confidence: 0.9311849

00:25:09.795 --> 00:25:11.975 regarded and managed as DCIS,
NOTE Confidence: 0.9611003

00:25:12.595 --> 00:25:13.735 not even recognized,
NOTE Confidence: 0.9921875

00:25:14.275 --> 00:25:14.775 classified
NOTE Confidence: 0.91086155

00:25:15.155 --> 00:25:16.375 just as DCIS.
NOTE Confidence: 0.8883667

00:25:16.675 --> 00:25:17.955 And indeed, that's a very
NOTE Confidence: 0.8883667

00:25:17.955 --> 00:25:18.455 good
NOTE Confidence: 0.8772786

00:25:18.835 --> 00:25:19.335 prognosis.
NOTE Confidence: 0.94107056

00:25:19.955 --> 00:25:22.275 And generally speaking, in the
NOTE Confidence: 0.94107056

00:25:22.275 --> 00:25:23.494 absence of invasion,
NOTE Confidence: 0.9970703

00:25:23.955 --> 00:25:24.455 EPC
NOTE Confidence: 0.923086

00:25:25.220 --> 00:25:27.240 is staged as in cytocarcinoma
NOTE Confidence: 0.94970703

00:25:27.859 --> 00:25:28.359 because

NOTE Confidence: 0.89941406
00:25:28.980 --> 00:25:29.640 as a behavior
NOTE Confidence: 0.9652995
00:25:29.940 --> 00:25:31.720 similar to that of DCIS.
NOTE Confidence: 0.9892578
00:25:33.700 --> 00:25:34.920 When the previous
NOTE Confidence: 0.97924805
00:25:35.380 --> 00:25:37.060 edition of the WHO was
NOTE Confidence: 0.97924805
00:25:37.060 --> 00:25:38.820 published, there was only one
NOTE Confidence: 0.97924805
00:25:38.820 --> 00:25:40.119 series of twelve
NOTE Confidence: 0.9897461
00:25:40.555 --> 00:25:41.855 EPC like carcinomas
NOTE Confidence: 0.96122885
00:25:42.155 --> 00:25:44.095 of high nuclear grade without
NOTE Confidence: 0.96122885
00:25:44.155 --> 00:25:45.994 frank invasion and one of
NOTE Confidence: 0.96122885
00:25:45.994 --> 00:25:47.775 the ten patients with follow-up
NOTE Confidence: 0.96122885
00:25:47.994 --> 00:25:49.295 had died of disease.
NOTE Confidence: 0.9631958
00:25:49.755 --> 00:25:50.895 So at that point,
NOTE Confidence: 0.96028644
00:25:51.195 --> 00:25:52.875 it was decided that the
NOTE Confidence: 0.96028644
00:25:52.875 --> 00:25:53.375 diagnosis
NOTE Confidence: 0.9987793
00:25:53.755 --> 00:25:54.575 of EPC
NOTE Confidence: 0.9431254

00:25:55.100 --> 00:25:56.940 should be restricted to tumors
NOTE Confidence: 0.9431254

00:25:56.940 --> 00:25:59.180 with low or intermediate nuclear
NOTE Confidence: 0.9431254

00:25:59.180 --> 00:26:01.200 grade. And if the EPC
NOTE Confidence: 0.9431254

00:26:01.340 --> 00:26:03.580 like carcinoma had high nuclear
NOTE Confidence: 0.9431254

00:26:03.580 --> 00:26:05.119 grade or HER2 positive,
NOTE Confidence: 0.982666

00:26:06.619 --> 00:26:07.119 profile,
NOTE Confidence: 0.9930556

00:26:07.565 --> 00:26:08.924 it should be classified as
NOTE Confidence: 0.9930556

00:26:08.924 --> 00:26:10.945 an invasive papillary carcinoma.
NOTE Confidence: 0.9532878

00:26:11.484 --> 00:26:13.244 That is back in twenty
NOTE Confidence: 0.9532878

00:26:13.244 --> 00:26:13.744 nineteen.
NOTE Confidence: 0.971871

00:26:14.205 --> 00:26:15.905 We fast forward to twenty
NOTE Confidence: 0.971871

00:26:16.205 --> 00:26:17.965 twenty six, this is no
NOTE Confidence: 0.971871

00:26:17.965 --> 00:26:19.825 longer true. There is still
NOTE Confidence: 0.971871

00:26:19.885 --> 00:26:22.225 one series only of EPC
NOTE Confidence: 0.971871

00:26:22.285 --> 00:26:24.070 like carcinoma of high nuclear
NOTE Confidence: 0.971871

00:26:24.070 --> 00:26:25.669 grade. And this was thought

NOTE Confidence: 0.971871
00:26:25.669 --> 00:26:27.690 to be not sufficient evidence
NOTE Confidence: 0.971871
00:26:27.909 --> 00:26:28.730 to classify
NOTE Confidence: 0.99522567
00:26:29.429 --> 00:26:31.109 EPC like carcinoma of high
NOTE Confidence: 0.99522567
00:26:31.109 --> 00:26:32.889 nuclear grade as invasive.
NOTE Confidence: 0.95522463
00:26:33.590 --> 00:26:35.109 So in the absence of
NOTE Confidence: 0.95522463
00:26:35.109 --> 00:26:37.365 crank invasion, the editorial board
NOTE Confidence: 0.95522463
00:26:37.525 --> 00:26:39.865 recommends that EPC like carcinoma
NOTE Confidence: 0.9782715
00:26:40.405 --> 00:26:41.765 of high nuclear grade of
NOTE Confidence: 0.9782715
00:26:41.765 --> 00:26:44.005 HER2 positive be categorized as
NOTE Confidence: 0.9782715
00:26:44.005 --> 00:26:44.505 EPC
NOTE Confidence: 0.98946124
00:26:44.965 --> 00:26:46.665 and staged as DCIS.
NOTE Confidence: 0.98301476
00:26:47.125 --> 00:26:48.484 Remember, they don't have my
NOTE Confidence: 0.98301476
00:26:48.484 --> 00:26:49.705 epithelial cells
NOTE Confidence: 0.9096331
00:26:50.130 --> 00:26:52.050 with a comment enumerating the
NOTE Confidence: 0.9096331
00:26:52.050 --> 00:26:53.109 unusual features.
NOTE Confidence: 0.9690755

00:26:53.970 --> 00:26:54.869 In these cases,
NOTE Confidence: 0.9906684

00:26:55.250 --> 00:26:57.030 it is recommended to do
NOTE Confidence: 0.9906684

00:26:57.090 --> 00:26:59.109 a thorough histological examination
NOTE Confidence: 0.99332684

00:26:59.490 --> 00:27:00.390 of the specimen
NOTE Confidence: 0.96571183

00:27:00.850 --> 00:27:02.850 and maybe submit additional section
NOTE Confidence: 0.96571183

00:27:02.850 --> 00:27:04.150 to exclude the possibility
NOTE Confidence: 0.9954427

00:27:04.595 --> 00:27:06.435 of a high grade invasive
NOTE Confidence: 0.9954427

00:27:06.435 --> 00:27:06.935 carcinoma
NOTE Confidence: 0.93084717

00:27:07.475 --> 00:27:08.215 with pseudopapillary
NOTE Confidence: 0.9572917

00:27:08.595 --> 00:27:11.015 growth secondary to central necrosis.
NOTE Confidence: 0.98670655

00:27:11.395 --> 00:27:12.755 I have here an example
NOTE Confidence: 0.98670655

00:27:12.755 --> 00:27:14.515 of a case that clearly
NOTE Confidence: 0.98670655

00:27:14.515 --> 00:27:16.915 looks invasive, but it appears
NOTE Confidence: 0.98670655

00:27:16.915 --> 00:27:18.855 that the margin is relatively
NOTE Confidence: 0.9938965

00:27:19.155 --> 00:27:19.975 well circumscribed.
NOTE Confidence: 0.9424316

00:27:20.650 --> 00:27:22.350 It has a papillary architecture

NOTE Confidence: 0.7573242
00:27:23.210 --> 00:27:23.710 secondary
NOTE Confidence: 0.963953
00:27:24.010 --> 00:27:26.750 to extensive tumor necrosis. So
NOTE Confidence: 0.963953
00:27:26.890 --> 00:27:29.290 these cases may mimic EPC
NOTE Confidence: 0.963953
00:27:29.290 --> 00:27:31.369 of high nuclear grade. Beware
NOTE Confidence: 0.963953
00:27:31.369 --> 00:27:32.350 of these cases.
NOTE Confidence: 0.9375407
00:27:32.984 --> 00:27:35.005 And if you are convinced
NOTE Confidence: 0.9375407
00:27:35.065 --> 00:27:36.345 that you're dealing with an
NOTE Confidence: 0.9375407
00:27:36.345 --> 00:27:37.325 EPC only
NOTE Confidence: 0.9263222
00:27:37.625 --> 00:27:39.225 with high nuclear grade, the
NOTE Confidence: 0.9263222
00:27:39.225 --> 00:27:41.145 patient will be managed and
NOTE Confidence: 0.9263222
00:27:41.145 --> 00:27:43.065 staged and managed as having
NOTE Confidence: 0.9263222
00:27:43.065 --> 00:27:43.725 a DCIS.
NOTE Confidence: 0.9968262
00:27:44.105 --> 00:27:45.484 This remains a controversial
NOTE Confidence: 0.9628174
00:27:46.265 --> 00:27:47.965 issue. We'll see what happens.
NOTE Confidence: 0.9628174
00:27:48.109 --> 00:27:49.730 If there is no definite,
NOTE Confidence: 0.9296875

00:27:50.030 --> 00:27:50.530 DCIS,
NOTE Confidence: 0.97176844

00:27:51.550 --> 00:27:53.070 then it's also important in
NOTE Confidence: 0.97176844

00:27:53.070 --> 00:27:54.510 these cases to rule out
NOTE Confidence: 0.97176844

00:27:54.510 --> 00:27:55.010 metastasis
NOTE Confidence: 0.90671116

00:27:55.790 --> 00:27:57.869 and metastatic carcinoma from another
NOTE Confidence: 0.90671116

00:27:57.869 --> 00:27:59.090 site. You can use,
NOTE Confidence: 0.9532878

00:27:59.790 --> 00:28:00.290 epithelial,
NOTE Confidence: 0.97265625

00:28:00.590 --> 00:28:01.185 you know,
NOTE Confidence: 0.8633789

00:28:01.745 --> 00:28:03.585 breast specific markers such as
NOTE Confidence: 0.8633789

00:28:03.585 --> 00:28:05.365 GATA, SOGSTANT, TRPS1
NOTE Confidence: 0.89778644

00:28:06.145 --> 00:28:07.125 in the appropriate
NOTE Confidence: 0.96812856

00:28:07.505 --> 00:28:09.745 panel to demonstrate that the
NOTE Confidence: 0.96812856

00:28:09.745 --> 00:28:11.265 tumor is indeed of breast
NOTE Confidence: 0.96812856

00:28:11.265 --> 00:28:11.765 origin.
NOTE Confidence: 0.9295422

00:28:12.865 --> 00:28:14.990 The second section on epithelial
NOTE Confidence: 0.9295422

00:28:15.210 --> 00:28:17.070 tumors deals with a variety

NOTE Confidence: 0.9295422
00:28:17.130 --> 00:28:18.910 of issue. Nuclear pleomorphism
NOTE Confidence: 0.9902344
00:28:19.690 --> 00:28:21.230 is always a question
NOTE Confidence: 0.61450195
00:28:21.770 --> 00:28:22.270 how,
NOTE Confidence: 0.9980469
00:28:22.970 --> 00:28:24.650 what's the minimum proportion of
NOTE Confidence: 0.9980469
00:28:24.650 --> 00:28:25.550 tumor nuclei
NOTE Confidence: 0.9251302
00:28:26.010 --> 00:28:26.990 that should be,
NOTE Confidence: 0.8726196
00:28:28.085 --> 00:28:30.325 should show marked nuclear tibia
NOTE Confidence: 0.8726196
00:28:30.325 --> 00:28:32.185 before score three is allocated.
NOTE Confidence: 0.9741211
00:28:32.565 --> 00:28:34.665 This remains not well defined
NOTE Confidence: 0.8931663
00:28:35.445 --> 00:28:37.365 and finding an occasional and
NOTE Confidence: 0.8931663
00:28:37.365 --> 00:28:39.365 larger bizarre nucleus should not
NOTE Confidence: 0.8931663
00:28:39.365 --> 00:28:40.805 be used to give a
NOTE Confidence: 0.8931663
00:28:40.805 --> 00:28:42.405 score three rather than a
NOTE Confidence: 0.8931663
00:28:42.405 --> 00:28:43.385 score two.
NOTE Confidence: 0.9301758
00:28:44.940 --> 00:28:46.559 Tumor infiltrating lymphocytes,
NOTE Confidence: 0.9841431

00:28:47.100 --> 00:28:48.940 it is recognized that they
NOTE Confidence: 0.9841431

00:28:48.940 --> 00:28:50.000 can be prognostically,
NOTE Confidence: 0.98250324

00:28:51.660 --> 00:28:53.020 can be incorporated in the
NOTE Confidence: 0.98250324

00:28:53.020 --> 00:28:54.799 pathology report as prognostic
NOTE Confidence: 0.9592285

00:28:55.100 --> 00:28:57.280 factor, but there is no
NOTE Confidence: 0.9592285

00:28:57.500 --> 00:28:58.000 mandate
NOTE Confidence: 0.9808757

00:28:58.380 --> 00:28:59.440 to do so.
NOTE Confidence: 0.96191406

00:28:59.835 --> 00:29:00.075 And,
NOTE Confidence: 0.84915805

00:29:00.635 --> 00:29:01.835 if you want to report
NOTE Confidence: 0.84915805

00:29:01.835 --> 00:29:04.235 TEOS, use use the the
NOTE Confidence: 0.84915805

00:29:04.235 --> 00:29:04.735 standardized
NOTE Confidence: 0.94470215

00:29:05.595 --> 00:29:07.135 protocol by the International
NOTE Confidence: 0.9667969

00:29:07.515 --> 00:29:09.434 Biomarket Working Group on Breast
NOTE Confidence: 0.9667969

00:29:09.434 --> 00:29:09.934 Cancer.
NOTE Confidence: 0.9446777

00:29:10.315 --> 00:29:12.174 For HER2, it is recognized,
NOTE Confidence: 0.9241211

00:29:13.034 --> 00:29:14.735 same as the CAP guidelines,

NOTE Confidence: 0.97462463
00:29:15.620 --> 00:29:17.540 that, HER2 can be three
NOTE Confidence: 0.97462463
00:29:17.540 --> 00:29:19.140 plus, two plus, one plus,
NOTE Confidence: 0.97462463
00:29:19.140 --> 00:29:20.900 and then zero or zero
NOTE Confidence: 0.97462463
00:29:20.900 --> 00:29:21.400 plus.
NOTE Confidence: 0.9455392
00:29:21.940 --> 00:29:23.380 That should be reported. It's
NOTE Confidence: 0.9455392
00:29:23.380 --> 00:29:25.560 not necessary to say low
NOTE Confidence: 0.9455392
00:29:25.780 --> 00:29:27.240 and ultra low terminology.
NOTE Confidence: 0.8966534
00:29:28.255 --> 00:29:29.695 And basically we are all
NOTE Confidence: 0.8966534
00:29:29.695 --> 00:29:31.395 pretty much used to this
NOTE Confidence: 0.8966534
00:29:31.534 --> 00:29:32.674 by now, right?
NOTE Confidence: 0.8123576
00:29:33.375 --> 00:29:35.155 One big change I think
NOTE Confidence: 0.8123576
00:29:35.215 --> 00:29:36.355 is regards microinvasive
NOTE Confidence: 0.9616699
00:29:36.655 --> 00:29:38.655 carcinoma. It's still defined as
NOTE Confidence: 0.9616699
00:29:38.655 --> 00:29:40.034 invasive breast carcinoma
NOTE Confidence: 0.9232701
00:29:40.414 --> 00:29:42.195 less up to one millimeter
NOTE Confidence: 0.9232701

00:29:42.255 --> 00:29:42.995 in size,
NOTE Confidence: 0.973655
00:29:43.340 --> 00:29:44.720 But it has been decided
NOTE Confidence: 0.973655
00:29:44.780 --> 00:29:46.080 that if they are closely
NOTE Confidence: 0.973655
00:29:46.220 --> 00:29:46.720 associated,
NOTE Confidence: 0.84760743
00:29:47.100 --> 00:29:48.960 the foci of micro invasion,
NOTE Confidence: 0.9736328
00:29:49.340 --> 00:29:50.080 that are
NOTE Confidence: 0.92663574
00:29:50.940 --> 00:29:52.400 within the five millimeter
NOTE Confidence: 0.95133466
00:29:52.700 --> 00:29:55.040 range, they should be submitted
NOTE Confidence: 0.95133466
00:29:55.180 --> 00:29:57.100 and staged according to the
NOTE Confidence: 0.95133466
00:29:57.100 --> 00:29:58.240 overall size.
NOTE Confidence: 0.98382163
00:29:58.645 --> 00:30:00.085 Here is actually an example
NOTE Confidence: 0.98382163
00:30:00.085 --> 00:30:01.125 of a case that we
NOTE Confidence: 0.98382163
00:30:01.125 --> 00:30:02.985 received from an outside institution
NOTE Confidence: 0.9125434
00:30:03.445 --> 00:30:05.304 where there was micro invasion
NOTE Confidence: 0.9125434
00:30:05.365 --> 00:30:06.825 in each of these,
NOTE Confidence: 0.80289716
00:30:07.525 --> 00:30:08.025 TDLUs

NOTE Confidence: 0.89661455
00:30:09.125 --> 00:30:11.205 and, the outside pathologists had
NOTE Confidence: 0.89661455
00:30:11.205 --> 00:30:13.340 reported the four separate foci
NOTE Confidence: 0.89661455
00:30:13.480 --> 00:30:14.299 of microinvasion,
NOTE Confidence: 0.94543004
00:30:15.159 --> 00:30:16.679 but we did span the
NOTE Confidence: 0.94543004
00:30:16.679 --> 00:30:18.200 entire thing and they became
NOTE Confidence: 0.94543004
00:30:18.200 --> 00:30:20.520 four millimeter in size. So
NOTE Confidence: 0.94543004
00:30:20.520 --> 00:30:22.120 this is an application of
NOTE Confidence: 0.94543004
00:30:22.120 --> 00:30:24.380 that rule. Let's see how
NOTE Confidence: 0.94543004
00:30:24.679 --> 00:30:25.425 will that
NOTE Confidence: 0.8495178
00:30:26.065 --> 00:30:27.745 adopt because many times the
NOTE Confidence: 0.8495178
00:30:27.745 --> 00:30:28.885 amount of microinvasive
NOTE Confidence: 0.96430665
00:30:29.985 --> 00:30:31.845 carcinoma is very, very scant.
NOTE Confidence: 0.9917399
00:30:32.225 --> 00:30:33.665 So we'll see how it
NOTE Confidence: 0.9917399
00:30:33.665 --> 00:30:34.165 goes.
NOTE Confidence: 0.9688721
00:30:34.625 --> 00:30:35.765 Invasive lobular
NOTE Confidence: 0.9750366

00:30:36.145 --> 00:30:37.905 should be graded based on
NOTE Confidence: 0.9750366

00:30:37.905 --> 00:30:39.605 Nottingham grading system.
NOTE Confidence: 0.8740758

00:30:39.985 --> 00:30:41.105 We also have to report
NOTE Confidence: 0.8740758

00:30:41.105 --> 00:30:41.919 the cytomorphology,
NOTE Confidence: 0.99121094

00:30:42.860 --> 00:30:43.520 the architectural
NOTE Confidence: 0.6994629

00:30:43.900 --> 00:30:44.400 patterns,
NOTE Confidence: 0.6678874

00:30:45.100 --> 00:30:46.960 as mentioned here.
NOTE Confidence: 0.9915527

00:30:47.260 --> 00:30:49.039 The patterns can be classic,
NOTE Confidence: 0.9982422

00:30:49.340 --> 00:30:49.840 trabecular,
NOTE Confidence: 0.9489136

00:30:50.380 --> 00:30:51.520 solid, alveolar.
NOTE Confidence: 0.975179

00:30:51.980 --> 00:30:53.580 There is also a recent
NOTE Confidence: 0.975179

00:30:53.580 --> 00:30:54.080 variation,
NOTE Confidence: 0.96809894

00:30:54.700 --> 00:30:56.355 that of the solid pattern
NOTE Confidence: 0.96809894

00:30:56.355 --> 00:30:57.815 that is solid papillary
NOTE Confidence: 0.7813721

00:30:58.595 --> 00:30:59.235 that should,
NOTE Confidence: 0.99831814

00:31:00.195 --> 00:31:02.595 be recognized to avoid confusion

NOTE Confidence: 0.99831814
00:31:02.595 --> 00:31:04.295 with other papillary lesions.
NOTE Confidence: 0.99437666
00:31:04.835 --> 00:31:05.875 The new kid on the
NOTE Confidence: 0.99437666
00:31:05.875 --> 00:31:07.815 block is ILC with extracellular
NOTE Confidence: 0.9782715
00:31:08.275 --> 00:31:08.775 mucin
NOTE Confidence: 0.90884304
00:31:09.289 --> 00:31:11.390 that has recently been described,
NOTE Confidence: 0.90884304
00:31:11.690 --> 00:31:13.710 is often associated with lymphoid
NOTE Confidence: 0.90884304
00:31:13.850 --> 00:31:14.350 metastasis,
NOTE Confidence: 0.9275648
00:31:15.529 --> 00:31:17.710 and often has features unusual
NOTE Confidence: 0.9275648
00:31:17.850 --> 00:31:19.770 for invasive lobula. Grade three,
NOTE Confidence: 0.9275648
00:31:19.770 --> 00:31:20.669 tumor necrosis,
NOTE Confidence: 0.87870276
00:31:21.370 --> 00:31:22.350 HER2 positivity.
NOTE Confidence: 0.9208577
00:31:23.134 --> 00:31:24.914 And, also the extracellular
NOTE Confidence: 0.9473877
00:31:25.294 --> 00:31:26.995 mucin may be focal,
NOTE Confidence: 0.9503174
00:31:27.455 --> 00:31:28.654 but it should be,
NOTE Confidence: 0.8676758
00:31:29.294 --> 00:31:29.794 separated.
NOTE Confidence: 0.9319724

00:31:30.414 --> 00:31:31.715 It has a poor prognosis,
NOTE Confidence: 0.9319724

00:31:31.855 --> 00:31:32.995 so it should be separated
NOTE Confidence: 0.9319724

00:31:33.215 --> 00:31:34.595 from true mucinous
NOTE Confidence: 0.9943034

00:31:35.215 --> 00:31:36.914 carcinoma that has a favorable
NOTE Confidence: 0.9943034

00:31:37.054 --> 00:31:37.554 prognosis.
NOTE Confidence: 0.9935608

00:31:38.290 --> 00:31:39.350 There is some nomenclature
NOTE Confidence: 0.9057312

00:31:40.050 --> 00:31:41.510 issue related to tubulobular
NOTE Confidence: 0.98105717

00:31:41.970 --> 00:31:43.410 carcinoma. A term that I
NOTE Confidence: 0.98105717

00:31:43.410 --> 00:31:45.810 personally rarely use because I
NOTE Confidence: 0.98105717

00:31:45.810 --> 00:31:46.710 find it very,
NOTE Confidence: 0.99243164

00:31:47.730 --> 00:31:48.390 you know,
NOTE Confidence: 0.9819336

00:31:48.770 --> 00:31:49.270 ambiguous.
NOTE Confidence: 0.9640137

00:31:49.985 --> 00:31:50.945 In the past has been
NOTE Confidence: 0.9640137

00:31:50.945 --> 00:31:52.885 used for tumors with combined
NOTE Confidence: 0.8569946

00:31:53.345 --> 00:31:55.045 invasive lobular and small
NOTE Confidence: 0.82128906

00:31:55.425 --> 00:31:57.285 well formed glands morphology.

NOTE Confidence: 0.930855
00:31:58.065 --> 00:31:59.425 There was a suggestion to
NOTE Confidence: 0.930855
00:31:59.425 --> 00:32:00.965 say, okay, let's do icadigin.
NOTE Confidence: 0.930855
00:32:01.105 --> 00:32:01.605 Icadigin
NOTE Confidence: 0.9363185
00:32:01.905 --> 00:32:03.880 positive, we call it docile.
NOTE Confidence: 0.9363185
00:32:03.880 --> 00:32:05.400 Icadirin negative, we call it
NOTE Confidence: 0.9363185
00:32:05.400 --> 00:32:07.340 lobula. There is no evidence
NOTE Confidence: 0.9363185
00:32:07.400 --> 00:32:09.260 to support that. At present,
NOTE Confidence: 0.9363185
00:32:09.320 --> 00:32:10.919 it is recommended to call
NOTE Confidence: 0.9363185
00:32:10.919 --> 00:32:12.140 it tubular lobula
NOTE Confidence: 0.917782
00:32:12.679 --> 00:32:14.220 if there is no icadirin
NOTE Confidence: 0.917782
00:32:14.440 --> 00:32:15.720 expression. But if you have
NOTE Confidence: 0.917782
00:32:15.720 --> 00:32:17.900 a mix invasive lobula and
NOTE Confidence: 0.917782
00:32:18.154 --> 00:32:19.215 tubular carcinoma,
NOTE Confidence: 0.8803711
00:32:19.835 --> 00:32:20.955 then they,
NOTE Confidence: 0.9579671
00:32:21.514 --> 00:32:22.794 you call it as such
NOTE Confidence: 0.9579671

00:32:22.794 --> 00:32:25.434 if the invasive lobular elements
NOTE Confidence: 0.9579671

00:32:25.434 --> 00:32:27.534 are icadigin negative and those
NOTE Confidence: 0.95473635

00:32:27.835 --> 00:32:29.434 that look more tubular are
NOTE Confidence: 0.95473635

00:32:29.434 --> 00:32:31.630 icadigin positive. I'm not sure
NOTE Confidence: 0.95473635

00:32:31.630 --> 00:32:33.250 how much this helps but
NOTE Confidence: 0.85595703

00:32:33.870 --> 00:32:35.890 the invasive cribriform carcinoma
NOTE Confidence: 0.9780002

00:32:36.430 --> 00:32:37.630 needs to be called as
NOTE Confidence: 0.9780002

00:32:37.630 --> 00:32:40.050 such invasive to avoid confusion
NOTE Confidence: 0.9780002

00:32:40.110 --> 00:32:41.010 with cribriform
NOTE Confidence: 0.9973958

00:32:41.950 --> 00:32:42.450 carcinoma.
NOTE Confidence: 0.9980469

00:32:43.575 --> 00:32:44.794 Mucinous carcinoma
NOTE Confidence: 0.81903076

00:32:45.255 --> 00:32:45.735 has been,
NOTE Confidence: 0.949273

00:32:46.615 --> 00:32:48.855 is defined as having low
NOTE Confidence: 0.949273

00:32:48.855 --> 00:32:50.794 to intermediate nuclear grade
NOTE Confidence: 0.9076335

00:32:51.095 --> 00:32:52.135 and it needs to be
NOTE Confidence: 0.9076335

00:32:52.135 --> 00:32:54.075 ER positive, HER2 negative

NOTE Confidence: 0.88747334
00:32:54.774 --> 00:32:56.855 or composed of this, cluster
NOTE Confidence: 0.88747334
00:32:56.855 --> 00:32:58.855 of epithelial cells floating in
NOTE Confidence: 0.88747334
00:32:58.855 --> 00:32:59.310 mucin.
NOTE Confidence: 0.91986084
00:32:59.790 --> 00:33:01.230 Should not be confused with
NOTE Confidence: 0.91986084
00:33:01.230 --> 00:33:02.290 the cancer with
NOTE Confidence: 0.77945966
00:33:02.590 --> 00:33:03.090 mucin,
NOTE Confidence: 0.97726005
00:33:03.550 --> 00:33:05.550 but high nuclear grade or
NOTE Confidence: 0.97726005
00:33:05.550 --> 00:33:06.530 HER2 positivity
NOTE Confidence: 0.90882707
00:33:07.150 --> 00:33:08.510 because those tend to have
NOTE Confidence: 0.90882707
00:33:08.510 --> 00:33:09.810 a more aggressive behavior.
NOTE Confidence: 0.827029
00:33:10.190 --> 00:33:11.470 Shouldn't be confused with the
NOTE Confidence: 0.827029
00:33:11.470 --> 00:33:13.570 medioplastic carcinoma with chondromyxoid
NOTE Confidence: 0.88288224
00:33:14.430 --> 00:33:15.765 matrix that is going to
NOTE Confidence: 0.88288224
00:33:15.765 --> 00:33:16.745 be negative
NOTE Confidence: 0.9324454
00:33:17.285 --> 00:33:18.985 and not to be confused
NOTE Confidence: 0.9324454

00:33:19.045 --> 00:33:20.665 with ILC with extracellular
NOTE Confidence: 0.85366094

00:33:21.045 --> 00:33:22.645 amusing that also has a
NOTE Confidence: 0.85366094

00:33:22.645 --> 00:33:23.465 worse prognosis.
NOTE Confidence: 0.6781616

00:33:25.285 --> 00:33:26.665 A clinic cell carcinoma
NOTE Confidence: 0.94826835

00:33:26.965 --> 00:33:28.645 has been renamed as a
NOTE Confidence: 0.94826835

00:33:28.645 --> 00:33:31.360 clinic cell like carcinoma because
NOTE Confidence: 0.94826835

00:33:31.419 --> 00:33:33.100 in the breast, the so
NOTE Confidence: 0.94826835

00:33:33.100 --> 00:33:35.419 called syncic cell carcinoma does
NOTE Confidence: 0.94826835

00:33:35.419 --> 00:33:37.519 not have the molecular activation
NOTE Confidence: 0.94826835

00:33:37.659 --> 00:33:38.960 that are characteristic
NOTE Confidence: 0.98095703

00:33:39.500 --> 00:33:40.880 of a syncic cell carcinoma
NOTE Confidence: 0.9591147

00:33:41.340 --> 00:33:43.519 of salivary gland and pancreas.
NOTE Confidence: 0.96435547

00:33:43.855 --> 00:33:45.394 Actually looks more like,
NOTE Confidence: 0.99853516

00:33:46.095 --> 00:33:47.554 triple negative carcinoma
NOTE Confidence: 0.89001465

00:33:48.095 --> 00:33:49.235 and, or
NOTE Confidence: 0.8967285

00:33:49.615 --> 00:33:51.634 especially the carcinoma rising

NOTE Confidence: 0.99609375
00:33:52.014 --> 00:33:53.715 in association with MGA.
NOTE Confidence: 0.8417969
00:33:54.255 --> 00:33:54.755 Polymorphous,
NOTE Confidence: 0.99527997
00:33:55.855 --> 00:33:56.355 adenocarcinoma
NOTE Confidence: 0.959668
00:33:57.480 --> 00:33:59.180 was there for many additions,
NOTE Confidence: 0.959668
00:33:59.240 --> 00:34:00.940 but has finally been removed.
NOTE Confidence: 0.9684335
00:34:01.320 --> 00:34:02.600 There are, like, five or
NOTE Confidence: 0.9684335
00:34:02.600 --> 00:34:04.680 six cases reported all by
NOTE Confidence: 0.9684335
00:34:04.680 --> 00:34:06.120 the same people, and there
NOTE Confidence: 0.9684335
00:34:06.120 --> 00:34:08.040 is not enough evidence that
NOTE Confidence: 0.9684335
00:34:08.040 --> 00:34:09.320 this is a tumor that
NOTE Confidence: 0.9684335
00:34:09.320 --> 00:34:10.140 does exist.
NOTE Confidence: 0.9885254
00:34:10.914 --> 00:34:12.535 An issue is regarding
NOTE Confidence: 0.97542316
00:34:12.835 --> 00:34:13.335 neuroendocrine
NOTE Confidence: 0.9013672
00:34:13.875 --> 00:34:14.375 neoplasms.
NOTE Confidence: 0.9941406
00:34:15.795 --> 00:34:16.295 And,
NOTE Confidence: 0.9347127

00:34:16.674 --> 00:34:18.035 you know, they show breast
NOTE Confidence: 0.9347127

00:34:18.035 --> 00:34:19.015 cancer and neuroendocrine
NOTE Confidence: 0.96400034

00:34:19.315 --> 00:34:21.154 differentiation has been debated for
NOTE Confidence: 0.96400034

00:34:21.154 --> 00:34:22.994 many years. In nineteen sixty
NOTE Confidence: 0.96400034

00:34:22.994 --> 00:34:23.494 three,
NOTE Confidence: 0.95166016

00:34:23.799 --> 00:34:24.299 neuroendocrine
NOTE Confidence: 0.9924113

00:34:24.599 --> 00:34:26.599 differentiation in breast cancer was
NOTE Confidence: 0.9924113

00:34:26.599 --> 00:34:28.680 first described by two German
NOTE Confidence: 0.9924113

00:34:28.680 --> 00:34:29.900 pathologists again.
NOTE Confidence: 0.9016288

00:34:30.839 --> 00:34:32.680 In nineteen seventy seven, two
NOTE Confidence: 0.9016288

00:34:32.680 --> 00:34:34.940 pathologists from Memorial Sloan Kettering,
NOTE Confidence: 0.9016288

00:34:35.000 --> 00:34:36.859 Doctor. Woodruff and Kubila,
NOTE Confidence: 0.90005773

00:34:37.545 --> 00:34:39.545 report described the so called
NOTE Confidence: 0.90005773

00:34:39.545 --> 00:34:41.704 primary carcinoid tumor of the
NOTE Confidence: 0.90005773

00:34:41.704 --> 00:34:42.204 breast.
NOTE Confidence: 0.92519534

00:34:42.905 --> 00:34:44.444 This was a very debated

NOTE Confidence: 0.70617676
00:34:44.744 --> 00:34:45.244 publication.
NOTE Confidence: 0.90649414
00:34:46.425 --> 00:34:47.885 And at the time, neuroendocrine
NOTE Confidence: 0.90649414
00:34:48.105 --> 00:34:48.605 differentiation
NOTE Confidence: 0.9807129
00:34:49.065 --> 00:34:50.285 was at first demonstrated
NOTE Confidence: 0.9663086
00:34:50.744 --> 00:34:52.925 using silver stain and
NOTE Confidence: 0.8564996
00:34:53.840 --> 00:34:54.980 EM and neurosecretory
NOTE Confidence: 0.9824219
00:34:55.520 --> 00:34:56.020 granules.
NOTE Confidence: 0.9147339
00:34:56.480 --> 00:34:58.340 After eighty five, immunohistochemistry
NOTE Confidence: 0.99300134
00:34:58.880 --> 00:34:59.700 for neuroendocrine
NOTE Confidence: 0.9477539
00:35:00.000 --> 00:35:01.219 markers was introduced,
NOTE Confidence: 0.79091394
00:35:01.520 --> 00:35:02.580 chromo, synapto.
NOTE Confidence: 0.9594378
00:35:03.200 --> 00:35:04.960 But really, this was a
NOTE Confidence: 0.9594378
00:35:04.960 --> 00:35:06.180 very nebulous
NOTE Confidence: 0.94140625
00:35:06.560 --> 00:35:07.380 type of,
NOTE Confidence: 0.9892578
00:35:08.394 --> 00:35:08.894 topic.
NOTE Confidence: 0.94214314

00:35:09.594 --> 00:35:10.875 It was only in two
NOTE Confidence: 0.94214314

00:35:10.875 --> 00:35:12.875 thousand and three, the third
NOTE Confidence: 0.94214314

00:35:12.875 --> 00:35:14.875 edition of the WHO, that
NOTE Confidence: 0.94214314

00:35:14.875 --> 00:35:16.255 the neuroendocrine tumors
NOTE Confidence: 0.7755127

00:35:16.954 --> 00:35:17.934 were first,
NOTE Confidence: 0.9760742

00:35:18.795 --> 00:35:19.295 recognized
NOTE Confidence: 0.97207034

00:35:19.755 --> 00:35:20.974 to occur in the breast.
NOTE Confidence: 0.97347003

00:35:21.290 --> 00:35:22.190 They have morphology
NOTE Confidence: 0.9975586

00:35:22.570 --> 00:35:23.630 similar to
NOTE Confidence: 0.8175456

00:35:23.930 --> 00:35:24.430 neuroendocrine
NOTE Confidence: 0.96875

00:35:24.730 --> 00:35:25.230 tumors
NOTE Confidence: 0.90649414

00:35:25.530 --> 00:35:26.190 in GI,
NOTE Confidence: 0.8806966

00:35:26.890 --> 00:35:28.030 tract, and lung.
NOTE Confidence: 0.8820801

00:35:28.410 --> 00:35:29.290 And they it was,
NOTE Confidence: 0.9979384

00:35:30.570 --> 00:35:31.930 they were supposed to express
NOTE Confidence: 0.9979384

00:35:31.930 --> 00:35:32.430 neuroendocrine

NOTE Confidence: 0.9614258
00:35:32.730 --> 00:35:33.230 marker
NOTE Confidence: 0.92407227
00:35:33.770 --> 00:35:35.450 in greater than fifty percent
NOTE Confidence: 0.92407227
00:35:35.450 --> 00:35:36.349 of the cells.
NOTE Confidence: 0.9694824
00:35:36.984 --> 00:35:37.305 And,
NOTE Confidence: 0.93691
00:35:38.105 --> 00:35:40.185 although there was evidence that
NOTE Confidence: 0.93691
00:35:40.185 --> 00:35:41.484 the neuroendocrine differentiation
NOTE Confidence: 0.99286026
00:35:41.945 --> 00:35:43.885 was present also in other
NOTE Confidence: 0.99286026
00:35:44.105 --> 00:35:46.025 invasive breast carcinoma, they were
NOTE Confidence: 0.99286026
00:35:46.025 --> 00:35:48.605 classified as solid neuroendocrine carcinoma,
NOTE Confidence: 0.996365
00:35:49.239 --> 00:35:51.160 small cell carcinoma, large cell
NOTE Confidence: 0.996365
00:35:51.160 --> 00:35:51.660 carcinoma.
NOTE Confidence: 0.82197267
00:35:52.600 --> 00:35:55.260 In twenty twelve, fourth edition
NOTE Confidence: 0.95166016
00:35:56.040 --> 00:35:57.500 of the WHO classification,
NOTE Confidence: 0.9005534
00:35:58.680 --> 00:36:00.600 they are still similar to
NOTE Confidence: 0.9005534
00:36:00.600 --> 00:36:01.100 the
NOTE Confidence: 0.9097168

00:36:01.400 --> 00:36:03.260 GI tract and lung tumors.
NOTE Confidence: 0.73654515

00:36:03.960 --> 00:36:05.525 They express neuroendocrine
NOTE Confidence: 0.96172625

00:36:05.825 --> 00:36:07.105 market to a greater or
NOTE Confidence: 0.96172625

00:36:07.105 --> 00:36:09.424 lesser degree. It's not given
NOTE Confidence: 0.96172625

00:36:09.424 --> 00:36:10.645 a specific cutoff.
NOTE Confidence: 0.8847656

00:36:11.265 --> 00:36:11.585 And,
NOTE Confidence: 0.78027344

00:36:12.065 --> 00:36:13.045 also this
NOTE Confidence: 0.7788086

00:36:13.505 --> 00:36:14.005 designation
NOTE Confidence: 0.9982096

00:36:14.305 --> 00:36:15.045 of neuroendocrine
NOTE Confidence: 0.99902344

00:36:15.424 --> 00:36:15.924 features
NOTE Confidence: 0.97486705

00:36:16.464 --> 00:36:18.964 in carcinoma with neuroendocrine features
NOTE Confidence: 0.97486705

00:36:19.105 --> 00:36:19.605 included
NOTE Confidence: 0.46520996

00:36:19.905 --> 00:36:20.520 the new
NOTE Confidence: 0.9995117

00:36:21.000 --> 00:36:21.500 carcinomas
NOTE Confidence: 0.9916992

00:36:21.800 --> 00:36:23.100 with very specific
NOTE Confidence: 0.99902344

00:36:23.480 --> 00:36:23.980 morphology

NOTE Confidence: 0.7084961
00:36:24.680 --> 00:36:25.180 such
NOTE Confidence: 0.90071243
00:36:25.640 --> 00:36:27.660 as mucinous and solid papillary
NOTE Confidence: 0.90071243
00:36:27.719 --> 00:36:29.580 carcinoma that showed the neuroendocrine
NOTE Confidence: 0.90071243
00:36:29.800 --> 00:36:30.300 differentiation.
NOTE Confidence: 0.9073731
00:36:31.239 --> 00:36:33.000 And then we move on,
NOTE Confidence: 0.9967448
00:36:33.800 --> 00:36:35.260 to twenty eighteen
NOTE Confidence: 0.9650879
00:36:35.895 --> 00:36:37.655 when, there was an effort
NOTE Confidence: 0.9650879
00:36:37.655 --> 00:36:38.475 to harmonize
NOTE Confidence: 0.99780273
00:36:39.094 --> 00:36:39.995 the nomenclature
NOTE Confidence: 0.9920248
00:36:40.535 --> 00:36:41.195 of neuroendocrine
NOTE Confidence: 0.94384766
00:36:41.655 --> 00:36:42.155 neoplasm
NOTE Confidence: 0.9548645
00:36:42.695 --> 00:36:44.775 across organ systems. So a
NOTE Confidence: 0.9548645
00:36:44.775 --> 00:36:46.395 group was convened,
NOTE Confidence: 0.7973633
00:36:46.855 --> 00:36:48.475 a group of experts convened,
NOTE Confidence: 0.99471027
00:36:49.160 --> 00:36:50.700 and they agreed to classify
NOTE Confidence: 0.99471027

00:36:50.840 --> 00:36:51.340 neuroendocrine
NOTE Confidence: 0.96940106
00:36:51.719 --> 00:36:52.219 neoplasm
NOTE Confidence: 0.96380615
00:36:52.520 --> 00:36:54.460 throughout the body as well
NOTE Confidence: 0.96380615
00:36:54.600 --> 00:36:55.820 or poorly differentiated
NOTE Confidence: 0.9478027
00:36:56.680 --> 00:36:58.440 using the terminology that is
NOTE Confidence: 0.9478027
00:36:58.440 --> 00:37:00.300 used for pulmonary and gastrointestinal
NOTE Confidence: 0.9973958
00:37:01.000 --> 00:37:01.500 neuroendocrine
NOTE Confidence: 0.930542
00:37:01.800 --> 00:37:02.300 neoplasm.
NOTE Confidence: 0.93448156
00:37:02.760 --> 00:37:04.200 This was adapted to the
NOTE Confidence: 0.93448156
00:37:04.200 --> 00:37:06.185 breast. So in the twenty
NOTE Confidence: 0.93448156
00:37:06.185 --> 00:37:06.685 nineteen
NOTE Confidence: 0.9595947
00:37:07.864 --> 00:37:09.005 WHO book,
NOTE Confidence: 0.9920247
00:37:09.385 --> 00:37:09.885 neuroendocrine
NOTE Confidence: 0.882487
00:37:10.265 --> 00:37:10.765 neoplasm
NOTE Confidence: 0.9755452
00:37:11.145 --> 00:37:13.385 were separated from invasive breast
NOTE Confidence: 0.9755452
00:37:13.385 --> 00:37:14.844 cancer with neuroendocrine

NOTE Confidence: 1
00:37:15.385 --> 00:37:15.885 features
NOTE Confidence: 0.90926105
00:37:16.760 --> 00:37:18.680 that had less than ninety
NOTE Confidence: 0.90926105
00:37:18.680 --> 00:37:19.180 percent,
NOTE Confidence: 0.9892578
00:37:20.520 --> 00:37:21.020 neuroendocrine
NOTE Confidence: 0.9219971
00:37:21.400 --> 00:37:22.619 marker expression.
NOTE Confidence: 0.83081055
00:37:23.560 --> 00:37:23.960 And,
NOTE Confidence: 0.82006836
00:37:24.520 --> 00:37:25.420 the tumors
NOTE Confidence: 0.9730632
00:37:26.359 --> 00:37:28.219 that were regarded as neuroendocrine
NOTE Confidence: 0.9730632
00:37:28.440 --> 00:37:28.940 neoplasm
NOTE Confidence: 0.99072266
00:37:29.565 --> 00:37:30.704 had more than
NOTE Confidence: 0.8650716
00:37:31.005 --> 00:37:32.464 ninety percent neuroendocrine
NOTE Confidence: 0.7717285
00:37:32.765 --> 00:37:33.265 differentiation,
NOTE Confidence: 0.99902344
00:37:34.125 --> 00:37:34.625 excluding
NOTE Confidence: 0.86846924
00:37:35.005 --> 00:37:35.984 solid papillari,
NOTE Confidence: 0.9839681
00:37:36.765 --> 00:37:38.464 and mucinous carcinoma.
NOTE Confidence: 0.9979817

00:37:38.925 --> 00:37:40.545 They were classified as neuroendocrine
NOTE Confidence: 0.9140625

00:37:40.844 --> 00:37:41.744 tumor carcinoma,
NOTE Confidence: 0.9783529

00:37:42.609 --> 00:37:44.770 small cell carcinoma, or large
NOTE Confidence: 0.9783529

00:37:44.770 --> 00:37:45.829 cell neuroendocrine
NOTE Confidence: 0.99934894

00:37:46.130 --> 00:37:46.630 carcinoma.
NOTE Confidence: 0.9995117

00:37:47.250 --> 00:37:47.750 However,
NOTE Confidence: 0.9561157

00:37:49.250 --> 00:37:51.010 time passes and we recognize
NOTE Confidence: 0.9561157

00:37:51.010 --> 00:37:51.829 there are limitations
NOTE Confidence: 0.9770508

00:37:52.690 --> 00:37:53.670 to this classification.
NOTE Confidence: 0.99869794

00:37:54.369 --> 00:37:55.730 First of all, nobody has
NOTE Confidence: 0.99869794

00:37:55.730 --> 00:37:57.349 ever demonstrated the existence
NOTE Confidence: 0.9869792

00:37:57.684 --> 00:37:58.744 of benign neuroendocrine
NOTE Confidence: 0.9971924

00:37:59.285 --> 00:38:00.904 cells in the breast.
NOTE Confidence: 0.99680984

00:38:01.605 --> 00:38:03.464 There are many new neuroendocrine
NOTE Confidence: 0.9753825

00:38:03.924 --> 00:38:05.765 markers. Which one should we
NOTE Confidence: 0.9753825

00:38:05.765 --> 00:38:06.265 use

NOTE Confidence: 0.9565662
00:38:06.565 --> 00:38:07.924 to determine if there is
NOTE Confidence: 0.9565662
00:38:07.924 --> 00:38:08.505 a neuroendocrine
NOTE Confidence: 0.92407227
00:38:08.964 --> 00:38:09.464 differentiation?
NOTE Confidence: 0.9880297
00:38:10.260 --> 00:38:12.100 And what's most important, what
NOTE Confidence: 0.9880297
00:38:12.100 --> 00:38:14.020 is the clinical significance of
NOTE Confidence: 0.9880297
00:38:14.020 --> 00:38:14.520 neuroendocrine
NOTE Confidence: 1
00:38:14.820 --> 00:38:15.320 differentiation
NOTE Confidence: 0.96451825
00:38:16.020 --> 00:38:17.080 in breast tumors?
NOTE Confidence: 0.9188407
00:38:17.940 --> 00:38:20.360 It's really it remains debated
NOTE Confidence: 0.9188407
00:38:20.660 --> 00:38:21.400 and unknown.
NOTE Confidence: 0.9269856
00:38:21.860 --> 00:38:23.800 And actually, the breast neuroendocrine
NOTE Confidence: 0.96972656
00:38:24.260 --> 00:38:26.125 tumors that have a very
NOTE Confidence: 0.96972656
00:38:26.125 --> 00:38:27.744 low grade usually are
NOTE Confidence: 0.8978729
00:38:28.125 --> 00:38:30.765 quite ER, strongly positive. It
NOTE Confidence: 0.8978729
00:38:30.765 --> 00:38:31.664 can be managed,
NOTE Confidence: 0.88720703

00:38:32.285 --> 00:38:32.785 accordingly.
NOTE Confidence: 0.9794922

00:38:33.325 --> 00:38:34.785 And it's really unclear
NOTE Confidence: 0.9970161

00:38:35.164 --> 00:38:37.164 what is the prognostic and
NOTE Confidence: 0.9970161

00:38:37.164 --> 00:38:39.025 treatment implication of neuroendocrine
NOTE Confidence: 0.9980469

00:38:39.404 --> 00:38:40.224 breast carcinomas
NOTE Confidence: 0.94438034

00:38:41.060 --> 00:38:42.739 defined as such. Like a
NOTE Confidence: 0.94438034

00:38:42.739 --> 00:38:44.180 small cell carcinoma at our
NOTE Confidence: 0.94438034

00:38:44.180 --> 00:38:44.680 institution,
NOTE Confidence: 0.7084961

00:38:44.980 --> 00:38:45.880 patient receive
NOTE Confidence: 0.99365234

00:38:46.980 --> 00:38:47.960 platinum based
NOTE Confidence: 0.8129883

00:38:48.340 --> 00:38:48.840 chemotherapy,
NOTE Confidence: 0.99902344

00:38:49.619 --> 00:38:50.119 but
NOTE Confidence: 0.9562988

00:38:50.420 --> 00:38:51.080 not everywhere
NOTE Confidence: 0.9717285

00:38:51.540 --> 00:38:53.300 else, not everywhere in the
NOTE Confidence: 0.9717285

00:38:53.300 --> 00:38:55.000 world. So there is really
NOTE Confidence: 0.9995117

00:38:55.325 --> 00:38:56.385 a lot of uncertainty.

NOTE Confidence: 0.9499512

00:38:57.085 --> 00:38:58.945 So the WHO six edition

NOTE Confidence: 0.9499512

00:38:59.085 --> 00:39:01.025 tried to address these limitations

NOTE Confidence: 0.9215495

00:39:01.885 --> 00:39:02.865 and has proposed

NOTE Confidence: 0.86499023

00:39:03.965 --> 00:39:04.705 the diagnostic

NOTE Confidence: 0.9921875

00:39:05.165 --> 00:39:05.665 algorithm

NOTE Confidence: 0.992513

00:39:05.965 --> 00:39:08.365 for the identification of invasive

NOTE Confidence: 0.992513

00:39:08.365 --> 00:39:09.985 breast carcinoma with neuroendocrine

NOTE Confidence: 1

00:39:10.365 --> 00:39:10.865 morphology.

NOTE Confidence: 0.91950685

00:39:11.460 --> 00:39:12.680 If you have a mucinous

NOTE Confidence: 0.91950685

00:39:12.900 --> 00:39:14.680 or a solid papillary carcinoma

NOTE Confidence: 0.927653

00:39:15.060 --> 00:39:16.260 or if the tumor is

NOTE Confidence: 0.927653

00:39:16.260 --> 00:39:16.760 invasive

NOTE Confidence: 0.8677662

00:39:17.140 --> 00:39:18.500 of no special type and

NOTE Confidence: 0.8677662

00:39:18.500 --> 00:39:19.719 is negative for neuroendocrine

NOTE Confidence: 0.94714355

00:39:20.180 --> 00:39:21.700 marker, you call it as

NOTE Confidence: 0.94714355

00:39:21.700 --> 00:39:23.380 such. On the other, and
NOTE Confidence: 0.94714355

00:39:23.380 --> 00:39:24.520 here is an example.
NOTE Confidence: 0.9550917

00:39:24.895 --> 00:39:26.435 This is a solid papillary
NOTE Confidence: 0.9550917

00:39:26.495 --> 00:39:26.995 carcinoma,
NOTE Confidence: 0.9216145

00:39:27.535 --> 00:39:29.715 very strongly positive for ISNM1
NOTE Confidence: 0.93519944

00:39:30.335 --> 00:39:32.095 synapto, much less so for
NOTE Confidence: 0.93519944

00:39:32.095 --> 00:39:34.015 CHROMO. You still call it
NOTE Confidence: 0.93519944

00:39:34.015 --> 00:39:35.475 solid papillary carcinoma
NOTE Confidence: 0.8911133

00:39:35.775 --> 00:39:37.235 regardless of neuroendocrine
NOTE Confidence: 0.95803833

00:39:37.535 --> 00:39:39.320 markers. You don't even need
NOTE Confidence: 0.95803833

00:39:39.320 --> 00:39:40.219 to do them.
NOTE Confidence: 0.9944894

00:39:40.600 --> 00:39:41.480 On the other end of
NOTE Confidence: 0.9944894

00:39:41.480 --> 00:39:42.840 the spectrum, if you have
NOTE Confidence: 0.9944894

00:39:42.840 --> 00:39:44.060 a small cell carcinoma,
NOTE Confidence: 0.98647463

00:39:44.360 --> 00:39:45.480 then you can call it
NOTE Confidence: 0.98647463

00:39:45.480 --> 00:39:47.100 as such. This is exceptionally

NOTE Confidence: 0.9282715
00:39:47.640 --> 00:39:49.420 rare as a pure entity.
NOTE Confidence: 0.95703125
00:39:50.040 --> 00:39:50.540 Metastasis
NOTE Confidence: 0.8754883
00:39:51.000 --> 00:39:52.335 from the lung should be
NOTE Confidence: 0.8754883
00:39:52.335 --> 00:39:53.155 ruled out,
NOTE Confidence: 0.96547854
00:39:53.455 --> 00:39:55.155 but sometimes it can coexist
NOTE Confidence: 0.87565106
00:39:55.695 --> 00:39:57.075 as a component
NOTE Confidence: 0.9888509
00:39:57.855 --> 00:39:59.935 associated with an invasive breast
NOTE Confidence: 0.9888509
00:39:59.935 --> 00:40:00.435 carcinoma
NOTE Confidence: 0.77034503
00:40:00.895 --> 00:40:01.875 or other morphology.
NOTE Confidence: 0.961601
00:40:02.494 --> 00:40:03.535 And then there are the
NOTE Confidence: 0.961601
00:40:03.535 --> 00:40:06.020 tumors in between. Right? You
NOTE Confidence: 0.961601
00:40:06.239 --> 00:40:07.700 have neuroendocrine differentiation
NOTE Confidence: 0.31103516
00:40:09.440 --> 00:40:09.940 demonstrated
NOTE Confidence: 0.99902344
00:40:10.239 --> 00:40:10.739 by
NOTE Confidence: 0.9270833
00:40:11.360 --> 00:40:11.860 immunosohemical
NOTE Confidence: 0.9951172

00:40:12.320 --> 00:40:13.460 stains with neuroendocrine
NOTE Confidence: 0.99902344
00:40:13.840 --> 00:40:14.340 markers.
NOTE Confidence: 0.99758077
00:40:14.960 --> 00:40:16.400 If it is only focal
NOTE Confidence: 0.99758077
00:40:16.400 --> 00:40:18.160 and weak, just call it
NOTE Confidence: 0.99758077
00:40:18.160 --> 00:40:18.660 invasive
NOTE Confidence: 0.9998373
00:40:19.175 --> 00:40:19.835 breast carcinoma.
NOTE Confidence: 0.99039716
00:40:20.614 --> 00:40:21.255 If it is,
NOTE Confidence: 0.947347
00:40:22.135 --> 00:40:22.935 a little bit,
NOTE Confidence: 0.90792847
00:40:24.375 --> 00:40:26.875 moderate to strong, so evident,
NOTE Confidence: 0.90792847
00:40:27.015 --> 00:40:28.234 or is diffusely
NOTE Confidence: 0.9013672
00:40:29.015 --> 00:40:31.275 diffuse even though weak but
NOTE Confidence: 0.9013672
00:40:31.335 --> 00:40:31.835 unequivocal,
NOTE Confidence: 0.99943036
00:40:32.559 --> 00:40:33.920 you call it invasive breast
NOTE Confidence: 0.99943036
00:40:33.920 --> 00:40:34.420 carcinoma
NOTE Confidence: 0.9358995
00:40:34.719 --> 00:40:36.339 with neuroendocrine differentiation.
NOTE Confidence: 0.97333056
00:40:37.039 --> 00:40:38.559 And the group of large

NOTE Confidence: 0.97333056
00:40:38.559 --> 00:40:39.619 cell neuroendocrine
NOTE Confidence: 0.9746094
00:40:39.920 --> 00:40:40.420 carcinoma
NOTE Confidence: 0.8953247
00:40:40.719 --> 00:40:42.180 has been moved here.
NOTE Confidence: 0.9875837
00:40:43.279 --> 00:40:45.619 We have some preliminary evidence
NOTE Confidence: 0.9875837
00:40:45.680 --> 00:40:46.420 that maybe
NOTE Confidence: 0.90106493
00:40:46.799 --> 00:40:48.015 there is really a large
NOTE Confidence: 0.90106493
00:40:48.094 --> 00:40:48.994 cell neuroendocrine
NOTE Confidence: 0.93536377
00:40:49.295 --> 00:40:50.674 carcinoma of the breast,
NOTE Confidence: 0.98861927
00:40:51.214 --> 00:40:52.815 but, you know, we haven't
NOTE Confidence: 0.98861927
00:40:52.815 --> 00:40:54.974 published yet. So this is
NOTE Confidence: 0.98861927
00:40:54.974 --> 00:40:56.035 what the WHO
NOTE Confidence: 0.9968262
00:40:57.214 --> 00:40:57.795 is recommending.
NOTE Confidence: 0.9880778
00:40:58.414 --> 00:41:00.015 And then, if you have
NOTE Confidence: 0.9880778
00:41:00.015 --> 00:41:01.075 a typical neuroendocrine
NOTE Confidence: 1
00:41:01.535 --> 00:41:02.035 morphology
NOTE Confidence: 0.96978086

00:41:02.950 --> 00:41:03.770 and the neuroendocrine
NOTE Confidence: 0.9069417

00:41:04.310 --> 00:41:06.550 marker expression is strong and
NOTE Confidence: 0.9069417

00:41:06.550 --> 00:41:07.050 diffuse,
NOTE Confidence: 0.96903485

00:41:07.750 --> 00:41:09.210 you may be dealing with
NOTE Confidence: 0.96903485

00:41:09.270 --> 00:41:10.330 a true neuroendocrine
NOTE Confidence: 0.9914795

00:41:10.710 --> 00:41:12.230 tumor of the breast, which
NOTE Confidence: 0.9914795

00:41:12.230 --> 00:41:13.690 is going to be exceptionally
NOTE Confidence: 0.9567871

00:41:14.070 --> 00:41:14.570 rare,
NOTE Confidence: 0.9943499

00:41:14.870 --> 00:41:16.710 ER positive. If it is
NOTE Confidence: 0.9943499

00:41:16.710 --> 00:41:17.530 ER negative,
NOTE Confidence: 0.9996745

00:41:18.255 --> 00:41:19.474 consider the possibility
NOTE Confidence: 0.9836426

00:41:20.015 --> 00:41:21.234 of a metastasis
NOTE Confidence: 0.9899414

00:41:22.015 --> 00:41:23.795 and work it up accordingly.
NOTE Confidence: 0.959554

00:41:24.734 --> 00:41:26.275 So this is the entire
NOTE Confidence: 0.959554

00:41:26.494 --> 00:41:26.994 diagnostic
NOTE Confidence: 0.98999023

00:41:27.295 --> 00:41:27.795 algorithm.

NOTE Confidence: 0.90462977
00:41:28.575 --> 00:41:29.855 And then, I think I'll
NOTE Confidence: 0.90462977
00:41:29.855 --> 00:41:32.094 conclude talking about phylloids tumor,
NOTE Confidence: 0.90462977
00:41:32.094 --> 00:41:32.594 another,
NOTE Confidence: 0.9970703
00:41:33.460 --> 00:41:33.960 debated
NOTE Confidence: 0.845459
00:41:34.420 --> 00:41:34.920 topic.
NOTE Confidence: 0.9484863
00:41:35.460 --> 00:41:36.680 This is a table
NOTE Confidence: 0.97199357
00:41:37.140 --> 00:41:38.920 for the grading of phylloids
NOTE Confidence: 0.97199357
00:41:38.980 --> 00:41:40.900 tumor according to the fifth
NOTE Confidence: 0.97199357
00:41:40.900 --> 00:41:42.440 edition of the WHO.
NOTE Confidence: 0.9381348
00:41:42.820 --> 00:41:44.340 We were supposed to score
NOTE Confidence: 0.9381348
00:41:44.340 --> 00:41:46.120 two more borders, stromal cellularity
NOTE Confidence: 0.8776449
00:41:46.420 --> 00:41:49.015 at stromal atypia, mitotic activity,
NOTE Confidence: 0.9715006
00:41:49.474 --> 00:41:51.654 stromal overgrowth, and then assess,
NOTE Confidence: 0.75888675
00:41:52.114 --> 00:41:53.995 the presence of malignant at
NOTE Confidence: 0.75888675
00:41:53.995 --> 00:41:54.614 the oligosomelements.
NOTE Confidence: 0.9777669

00:41:55.714 --> 00:41:57.474 And if all those five
NOTE Confidence: 0.9777669

00:41:57.474 --> 00:41:59.894 parameters, tumor borders, stromal cellularity,
NOTE Confidence: 0.8703613

00:42:01.000 --> 00:42:01.900 stromal tibia,
NOTE Confidence: 0.88256836

00:42:02.440 --> 00:42:03.500 mitotic activity,
NOTE Confidence: 0.9405273

00:42:03.800 --> 00:42:05.820 or stromal overgrowth were present
NOTE Confidence: 0.8689575

00:42:06.120 --> 00:42:07.260 end of the malignant
NOTE Confidence: 0.9523926

00:42:07.720 --> 00:42:08.220 level,
NOTE Confidence: 0.96456474

00:42:08.760 --> 00:42:10.280 then we could call the
NOTE Confidence: 0.96456474

00:42:10.280 --> 00:42:11.420 tumor malignant.
NOTE Confidence: 0.75

00:42:11.880 --> 00:42:12.860 This approach
NOTE Confidence: 0.97232336

00:42:13.635 --> 00:42:15.895 using the five diagnostic criteria
NOTE Confidence: 0.97232336

00:42:16.035 --> 00:42:17.955 was also endorsed by the
NOTE Confidence: 0.97232336

00:42:17.955 --> 00:42:18.455 cap.
NOTE Confidence: 0.8996582

00:42:20.114 --> 00:42:21.415 If they were malignant
NOTE Confidence: 0.70007324

00:42:22.435 --> 00:42:24.455 elements except well differentiated
NOTE Confidence: 0.98291016

00:42:24.755 --> 00:42:25.255 liposarcoma,

NOTE Confidence: 0.95718586
00:42:25.955 --> 00:42:27.075 then you could still call
NOTE Confidence: 0.95718586
00:42:27.075 --> 00:42:29.250 it a malignant filoides tumor.
NOTE Confidence: 0.9938616
00:42:29.570 --> 00:42:30.930 However, there has been a
NOTE Confidence: 0.9938616
00:42:30.930 --> 00:42:31.810 study from,
NOTE Confidence: 0.9482422
00:42:32.450 --> 00:42:32.950 Emory
NOTE Confidence: 0.9770508
00:42:33.489 --> 00:42:33.989 University
NOTE Confidence: 0.84643555
00:42:34.610 --> 00:42:35.010 where,
NOTE Confidence: 0.9770101
00:42:35.570 --> 00:42:37.090 a group of sixty five
NOTE Confidence: 0.9770101
00:42:37.090 --> 00:42:38.710 malignant filoides tumor
NOTE Confidence: 0.7744629
00:42:39.170 --> 00:42:41.270 were, re reviewed and reclassified
NOTE Confidence: 0.95288086
00:42:41.890 --> 00:42:43.030 using the
NOTE Confidence: 0.92903644
00:42:43.434 --> 00:42:44.734 WHO fifth edition
NOTE Confidence: 0.99316406
00:42:45.194 --> 00:42:45.694 diagnostic
NOTE Confidence: 0.99902344
00:42:45.994 --> 00:42:46.494 criteria
NOTE Confidence: 0.9030533
00:42:47.114 --> 00:42:49.434 and, all margins were negative
NOTE Confidence: 0.9030533

00:42:49.434 --> 00:42:50.734 for phylloidis tumor
NOTE Confidence: 0.6166992

00:42:51.035 --> 00:42:51.535 but
NOTE Confidence: 0.76703894

00:42:52.234 --> 00:42:54.234 with on follow-up twenty patients
NOTE Confidence: 0.76703894

00:42:54.234 --> 00:42:55.775 developed decent metastasis
NOTE Confidence: 0.95979816

00:42:56.710 --> 00:42:58.010 and actually seven
NOTE Confidence: 0.99886066

00:42:58.390 --> 00:42:59.530 died of disease.
NOTE Confidence: 0.9781161

00:43:00.150 --> 00:43:01.590 This is a difficult table
NOTE Confidence: 0.9781161

00:43:01.590 --> 00:43:02.790 to see, a lot of
NOTE Confidence: 0.9781161

00:43:02.790 --> 00:43:03.290 information.
NOTE Confidence: 0.96527255

00:43:03.590 --> 00:43:05.110 The important thing is, you
NOTE Confidence: 0.96527255

00:43:05.110 --> 00:43:07.110 know, not every case had
NOTE Confidence: 0.96527255

00:43:07.110 --> 00:43:08.489 marked stromal atypia.
NOTE Confidence: 0.99505615

00:43:08.790 --> 00:43:10.614 Some had moderate atypia.
NOTE Confidence: 0.9873047

00:43:10.994 --> 00:43:11.815 Some cases,
NOTE Confidence: 0.97755265

00:43:12.355 --> 00:43:14.275 had the majority marked stromal
NOTE Confidence: 0.97755265

00:43:14.275 --> 00:43:16.375 cellularity, but some had moderate

NOTE Confidence: 0.97755265
00:43:16.515 --> 00:43:17.414 stromal cellularity.
NOTE Confidence: 0.87184495
00:43:18.035 --> 00:43:19.474 Not every case had more
NOTE Confidence: 0.87184495
00:43:19.474 --> 00:43:21.075 than ten mitosis per ten
NOTE Confidence: 0.87184495
00:43:21.075 --> 00:43:21.974 amp hour fields.
NOTE Confidence: 0.9713903
00:43:22.510 --> 00:43:23.870 In some cases, there was
NOTE Confidence: 0.9713903
00:43:23.870 --> 00:43:25.650 no stromal overgrowth, meaning
NOTE Confidence: 0.9760742
00:43:25.950 --> 00:43:27.470 not all the features were
NOTE Confidence: 0.9760742
00:43:27.470 --> 00:43:28.770 present in this
NOTE Confidence: 0.90511477
00:43:29.390 --> 00:43:32.450 phylloidous tumor that indeed developed
NOTE Confidence: 0.6483154
00:43:32.989 --> 00:43:33.730 this metastasis
NOTE Confidence: 0.986613
00:43:34.110 --> 00:43:35.489 proving to be malignant.
NOTE Confidence: 0.95441544
00:43:36.605 --> 00:43:38.125 And also if you look
NOTE Confidence: 0.95441544
00:43:38.125 --> 00:43:39.984 specifically at the seven patients,
NOTE Confidence: 0.95441544
00:43:40.125 --> 00:43:41.565 the filoidous tumor in the
NOTE Confidence: 0.95441544
00:43:41.565 --> 00:43:43.085 seven patients who died of
NOTE Confidence: 0.95441544

00:43:43.085 --> 00:43:43.585 disease,
NOTE Confidence: 0.8725586

00:43:44.125 --> 00:43:44.625 well,
NOTE Confidence: 0.70532227

00:43:45.565 --> 00:43:46.065 they,
NOTE Confidence: 0.96277964

00:43:46.525 --> 00:43:47.724 not all of them had
NOTE Confidence: 0.96277964

00:43:47.724 --> 00:43:49.830 a permeative border. The somal
NOTE Confidence: 0.96277964

00:43:49.830 --> 00:43:50.330 cellularity
NOTE Confidence: 0.9805908

00:43:50.950 --> 00:43:52.489 was not always marked.
NOTE Confidence: 0.9587199

00:43:53.350 --> 00:43:54.970 The same for somal atypia.
NOTE Confidence: 0.9587199

00:43:55.270 --> 00:43:57.830 Mitotic activity, somal overgrowth was
NOTE Confidence: 0.9587199

00:43:57.830 --> 00:43:58.810 also absent.
NOTE Confidence: 0.99283856

00:43:59.270 --> 00:44:00.630 None of these cases had
NOTE Confidence: 0.99283856

00:44:00.630 --> 00:44:01.130 malignant
NOTE Confidence: 0.96785486

00:44:01.590 --> 00:44:02.730 heterologous element.
NOTE Confidence: 0.9995117

00:44:03.075 --> 00:44:03.895 So it was concluded
NOTE Confidence: 0.99902344

00:44:04.355 --> 00:44:04.835 that,
NOTE Confidence: 0.95703125

00:44:05.155 --> 00:44:06.675 you know, these criteria are

NOTE Confidence: 0.95703125
00:44:06.675 --> 00:44:07.895 just too strict,
NOTE Confidence: 0.9991319
00:44:08.195 --> 00:44:09.234 and they need to be
NOTE Confidence: 0.9991319
00:44:09.234 --> 00:44:09.734 redefined.
NOTE Confidence: 0.98547363
00:44:10.835 --> 00:44:13.015 And, actually, the investigators
NOTE Confidence: 0.5605469
00:44:13.635 --> 00:44:14.135 propose
NOTE Confidence: 0.75512695
00:44:14.435 --> 00:44:15.094 a combination
NOTE Confidence: 0.99853516
00:44:15.635 --> 00:44:16.455 of criteria
NOTE Confidence: 0.92626053
00:44:16.869 --> 00:44:18.950 with stromal overgrowth with one
NOTE Confidence: 0.92626053
00:44:18.950 --> 00:44:20.730 of three additional features
NOTE Confidence: 0.8867843
00:44:21.349 --> 00:44:23.849 used to diagnose malignant phylloidis
NOTE Confidence: 0.8867843
00:44:24.070 --> 00:44:25.530 or mark stromal overgrowth
NOTE Confidence: 0.96113855
00:44:26.070 --> 00:44:27.430 with one or more of
NOTE Confidence: 0.96113855
00:44:27.430 --> 00:44:30.010 three additional features listed here
NOTE Confidence: 0.96113855
00:44:30.230 --> 00:44:31.905 to could be used as
NOTE Confidence: 0.96113855
00:44:31.905 --> 00:44:32.645 an alternative.
NOTE Confidence: 0.92145646

00:44:33.344 --> 00:44:34.805 And they use these criteria
NOTE Confidence: 0.92145646

00:44:35.025 --> 00:44:35.685 to reclassify
NOTE Confidence: 0.8248189

00:44:36.625 --> 00:44:38.145 a series of hundred and
NOTE Confidence: 0.8248189

00:44:38.145 --> 00:44:40.785 thirty six filoides tumor borderline
NOTE Confidence: 0.8248189

00:44:40.785 --> 00:44:41.525 and malignant
NOTE Confidence: 0.98833555

00:44:41.985 --> 00:44:43.364 with follow-up information.
NOTE Confidence: 0.97695315

00:44:44.225 --> 00:44:45.745 And they if you use
NOTE Confidence: 0.97695315

00:44:45.745 --> 00:44:47.800 the WHO fifth edition criteria,
NOTE Confidence: 0.9331482

00:44:49.060 --> 00:44:50.739 ninety four of these tumors
NOTE Confidence: 0.9331482

00:44:50.739 --> 00:44:52.900 were classified as borderline, but
NOTE Confidence: 0.9331482

00:44:52.900 --> 00:44:54.900 nearly ten percent developed distant
NOTE Confidence: 0.9331482

00:44:54.900 --> 00:44:56.440 METs. And the malignant
NOTE Confidence: 0.93739825

00:44:56.900 --> 00:44:59.060 forty two cases, fifty percent
NOTE Confidence: 0.93739825

00:44:59.060 --> 00:45:00.440 developed distant METs.
NOTE Confidence: 0.87691826

00:45:00.775 --> 00:45:02.295 While if they used the
NOTE Confidence: 0.87691826

00:45:02.295 --> 00:45:03.435 refined criteria,

NOTE Confidence: 0.9083201

00:45:04.135 --> 00:45:06.235 only the malignant phylloidis tumor

NOTE Confidence: 0.9083201

00:45:06.375 --> 00:45:07.755 developed distant metastasis,

NOTE Confidence: 0.85705566

00:45:09.175 --> 00:45:10.795 in with a metastasis

NOTE Confidence: 0.9719238

00:45:11.175 --> 00:45:12.635 rate of forty percent.

NOTE Confidence: 0.9132255

00:45:13.094 --> 00:45:14.614 There are limitations also to

NOTE Confidence: 0.9132255

00:45:14.614 --> 00:45:15.435 this study.

NOTE Confidence: 0.815153

00:45:16.020 --> 00:45:18.920 Retoceptive series, multi institutional, probably

NOTE Confidence: 0.89160156

00:45:19.540 --> 00:45:20.040 different,

NOTE Confidence: 0.9921875

00:45:20.900 --> 00:45:21.400 sampling,

NOTE Confidence: 0.96813965

00:45:22.180 --> 00:45:23.160 different treatment.

NOTE Confidence: 0.95436317

00:45:23.780 --> 00:45:25.540 Local recurrence rate in this

NOTE Confidence: 0.95436317

00:45:25.540 --> 00:45:27.700 series was very low compared

NOTE Confidence: 0.95436317

00:45:27.700 --> 00:45:29.160 to the distant metastasis

NOTE Confidence: 0.93774414

00:45:29.540 --> 00:45:30.760 rate that is extremely

NOTE Confidence: 0.85879177

00:45:31.140 --> 00:45:33.844 high. Normally, in malignant phylloidis

NOTE Confidence: 0.85879177

00:45:33.905 --> 00:45:35.445 tumor in other cities,
NOTE Confidence: 0.8621148

00:45:36.305 --> 00:45:37.765 you know, a distant metastasis
NOTE Confidence: 0.8621148

00:45:37.905 --> 00:45:39.445 rate of twenty percent,
NOTE Confidence: 0.9522298

00:45:39.745 --> 00:45:41.364 ten, sixteen percent.
NOTE Confidence: 0.99853516

00:45:41.985 --> 00:45:43.364 But this is extremely
NOTE Confidence: 0.99902344

00:45:43.665 --> 00:45:44.165 high
NOTE Confidence: 0.97783554

00:45:44.859 --> 00:45:46.140 no matter how you look
NOTE Confidence: 0.97783554

00:45:46.140 --> 00:45:47.180 at this. So there are
NOTE Confidence: 0.97783554

00:45:47.660 --> 00:45:48.880 there is some suspicion.
NOTE Confidence: 0.99658203

00:45:49.180 --> 00:45:49.680 However,
NOTE Confidence: 0.9495605

00:45:50.540 --> 00:45:52.560 it was recognized that indeed,
NOTE Confidence: 0.8989258

00:45:53.099 --> 00:45:53.500 these,
NOTE Confidence: 0.9928711

00:45:53.900 --> 00:45:55.760 five criteria are too restrictive
NOTE Confidence: 0.52490234

00:45:56.219 --> 00:45:56.960 and the
NOTE Confidence: 0.9808757

00:45:57.855 --> 00:45:59.075 panel of experts,
NOTE Confidence: 0.7989909

00:46:00.495 --> 00:46:01.635 you know, wrote

NOTE Confidence: 0.92561847

00:46:01.935 --> 00:46:03.315 a consensus paper

NOTE Confidence: 0.93981934

00:46:03.614 --> 00:46:04.495 stating that,

NOTE Confidence: 0.8249512

00:46:04.895 --> 00:46:05.295 it,

NOTE Confidence: 0.9970703

00:46:06.015 --> 00:46:06.915 strict criteria

NOTE Confidence: 0.9344076

00:46:07.215 --> 00:46:08.035 may underdiagnose

NOTE Confidence: 0.8949033

00:46:08.415 --> 00:46:10.435 filoides tumor that do have

NOTE Confidence: 0.8949033

00:46:10.710 --> 00:46:11.849 metastatic potential

NOTE Confidence: 0.66052246

00:46:12.469 --> 00:46:12.869 and,

NOTE Confidence: 0.95022583

00:46:13.670 --> 00:46:15.590 therefore, it is recommended to

NOTE Confidence: 0.95022583

00:46:15.590 --> 00:46:17.290 redefine malignant phylloidis

NOTE Confidence: 0.99473065

00:46:18.150 --> 00:46:19.750 as cases that have at

NOTE Confidence: 0.99473065

00:46:19.750 --> 00:46:21.750 least four of the five

NOTE Confidence: 0.99473065

00:46:21.750 --> 00:46:22.969 WHO criteria.

NOTE Confidence: 0.94640005

00:46:23.805 --> 00:46:25.825 And, so this is what

NOTE Confidence: 0.94640005

00:46:25.885 --> 00:46:28.285 the WHO six edition will

NOTE Confidence: 0.94640005

00:46:28.285 --> 00:46:28.785 recommend
NOTE Confidence: 0.9404602

00:46:29.244 --> 00:46:30.765 to use four of the
NOTE Confidence: 0.9404602

00:46:30.765 --> 00:46:32.224 five malignant criteria.
NOTE Confidence: 0.9851888

00:46:32.844 --> 00:46:34.545 If you have malignant heterologous
NOTE Confidence: 0.8244629

00:46:34.844 --> 00:46:36.625 elements except well differentiated
NOTE Confidence: 0.96069336

00:46:37.005 --> 00:46:37.505 liposarc,
NOTE Confidence: 0.9494751

00:46:38.300 --> 00:46:39.500 you can still call it,
NOTE Confidence: 0.9494751

00:46:39.820 --> 00:46:41.119 a malignant phylloids.
NOTE Confidence: 0.87280273

00:46:41.820 --> 00:46:43.020 So how do you equate
NOTE Confidence: 0.87280273

00:46:43.020 --> 00:46:44.320 the phylloids tumor,
NOTE Confidence: 0.96728516

00:46:45.099 --> 00:46:47.020 that sometimes don't fit neatly
NOTE Confidence: 0.96728516

00:46:47.020 --> 00:46:47.920 in diagnostic
NOTE Confidence: 0.80322266

00:46:48.300 --> 00:46:48.800 category?
NOTE Confidence: 0.9967913

00:46:49.260 --> 00:46:50.540 If there is a benign
NOTE Confidence: 0.9967913

00:46:50.540 --> 00:46:51.440 versus borderline
NOTE Confidence: 0.95947266

00:46:51.820 --> 00:46:52.640 and predominantly

NOTE Confidence: 0.93444824
00:46:53.020 --> 00:46:53.840 looks benign,
NOTE Confidence: 0.9609375
00:46:54.275 --> 00:46:55.235 but there are one or
NOTE Confidence: 0.9609375
00:46:55.235 --> 00:46:56.695 two features of borderline.
NOTE Confidence: 0.9205017
00:46:57.475 --> 00:46:59.155 You favor, you should favor
NOTE Confidence: 0.9205017
00:46:59.155 --> 00:47:00.135 a benign phylloides
NOTE Confidence: 0.9135132
00:47:00.675 --> 00:47:02.675 and mention the borderline features
NOTE Confidence: 0.9135132
00:47:02.675 --> 00:47:03.495 in a note.
NOTE Confidence: 0.8939616
00:47:04.355 --> 00:47:05.575 If, is unquestionable
NOTE Confidence: 0.96899414
00:47:05.955 --> 00:47:07.395 borderline, you call it as
NOTE Confidence: 0.96899414
00:47:07.395 --> 00:47:08.910 such. In the other differential
NOTE Confidence: 0.9917399
00:47:09.450 --> 00:47:11.230 between borderline and malignant,
NOTE Confidence: 0.9929199
00:47:12.010 --> 00:47:13.310 if it is predominantly
NOTE Confidence: 0.8980849
00:47:13.850 --> 00:47:16.250 borderline but some features, one
NOTE Confidence: 0.8980849
00:47:16.250 --> 00:47:17.310 or two are malignant,
NOTE Confidence: 0.9423077
00:47:17.850 --> 00:47:19.770 you say favor borderline and
NOTE Confidence: 0.9423077

00:47:19.770 --> 00:47:21.530 you mention the malignant features
NOTE Confidence: 0.9423077

00:47:21.530 --> 00:47:22.430 in a note.
NOTE Confidence: 0.90618026

00:47:22.805 --> 00:47:25.065 Three malignant features only, definitely
NOTE Confidence: 0.90618026

00:47:25.285 --> 00:47:25.945 a borderline.
NOTE Confidence: 0.9709418

00:47:26.725 --> 00:47:28.745 Four or five malignant features
NOTE Confidence: 0.9709418

00:47:28.885 --> 00:47:30.725 is definitely malignant, and you
NOTE Confidence: 0.9709418

00:47:30.725 --> 00:47:32.505 can call it malignant also
NOTE Confidence: 0.9016927

00:47:32.885 --> 00:47:34.165 if there is, there are
NOTE Confidence: 0.9016927

00:47:34.165 --> 00:47:34.665 malignant
NOTE Confidence: 0.8847453

00:47:35.619 --> 00:47:37.940 element. Again, except this well
NOTE Confidence: 0.8847453

00:47:37.940 --> 00:47:38.440 differentiated
NOTE Confidence: 0.99405926

00:47:39.380 --> 00:47:39.880 liposarcoma.
NOTE Confidence: 0.95803

00:47:40.820 --> 00:47:42.339 And this is a final
NOTE Confidence: 0.95803

00:47:42.339 --> 00:47:44.020 table that is going to
NOTE Confidence: 0.95803

00:47:44.020 --> 00:47:44.520 be,
NOTE Confidence: 0.9791667

00:47:45.780 --> 00:47:46.839 will appear in

NOTE Confidence: 0.95544434
00:47:47.219 --> 00:47:48.920 the WHO six edition
NOTE Confidence: 0.9522161
00:47:49.545 --> 00:47:51.385 that also lists of fibroadenoma.
NOTE Confidence: 0.9522161
00:47:51.385 --> 00:47:52.905 I don't have time to
NOTE Confidence: 0.9522161
00:47:52.905 --> 00:47:54.605 mention additional studies
NOTE Confidence: 0.9478711
00:47:55.145 --> 00:47:56.925 that, with regard to fibroadenoma,
NOTE Confidence: 0.94088745
00:47:57.464 --> 00:47:59.224 have identified the presence of
NOTE Confidence: 0.94088745
00:47:59.224 --> 00:48:00.925 focal peripheral infiltration.
NOTE Confidence: 0.98620605
00:48:01.560 --> 00:48:02.860 So occasional fibroadenoma
NOTE Confidence: 0.9967448
00:48:03.239 --> 00:48:04.300 may have slightly
NOTE Confidence: 0.9892578
00:48:04.680 --> 00:48:05.180 irregular
NOTE Confidence: 0.9241211
00:48:05.640 --> 00:48:07.580 interface with the adjacent stroma.
NOTE Confidence: 0.95214844
00:48:07.880 --> 00:48:09.580 And also mitotic activity
NOTE Confidence: 0.9375
00:48:09.880 --> 00:48:10.380 usually
NOTE Confidence: 0.8925781
00:48:10.680 --> 00:48:11.580 is absent,
NOTE Confidence: 0.92641604
00:48:12.120 --> 00:48:13.960 but can be low and,
NOTE Confidence: 0.982666

00:48:14.715 --> 00:48:17.295 especially in younger patients,
NOTE Confidence: 0.90913904

00:48:18.475 --> 00:48:20.955 with increased thromal cellularity and
NOTE Confidence: 0.90913904

00:48:20.955 --> 00:48:22.335 also increased mitosis.
NOTE Confidence: 0.89575195

00:48:23.195 --> 00:48:25.614 For benign filoides tumor, occasionally,
NOTE Confidence: 0.981329

00:48:26.075 --> 00:48:27.675 the margin may not be
NOTE Confidence: 0.981329

00:48:27.675 --> 00:48:28.495 so circumscribed,
NOTE Confidence: 0.99560547

00:48:29.520 --> 00:48:30.500 but slightly
NOTE Confidence: 0.93741125

00:48:30.960 --> 00:48:32.800 irregular. But you still call
NOTE Confidence: 0.93741125

00:48:32.800 --> 00:48:34.160 it benign if the other
NOTE Confidence: 0.93741125

00:48:34.160 --> 00:48:34.660 features,
NOTE Confidence: 0.97787195

00:48:35.520 --> 00:48:37.120 are of benign grade. And
NOTE Confidence: 0.97787195

00:48:37.120 --> 00:48:38.320 as I said, for the
NOTE Confidence: 0.97787195

00:48:38.320 --> 00:48:38.820 malignant,
NOTE Confidence: 0.8748779

00:48:40.080 --> 00:48:40.739 the presence,
NOTE Confidence: 0.9779297

00:48:41.765 --> 00:48:43.045 you need to have at
NOTE Confidence: 0.9779297

00:48:43.045 --> 00:48:44.825 least four of the five

NOTE Confidence: 0.9779297
00:48:44.885 --> 00:48:46.505 criteria to call it malignant
NOTE Confidence: 0.9628906
00:48:47.045 --> 00:48:48.025 and the presence
NOTE Confidence: 0.91465926
00:48:48.485 --> 00:48:51.305 of these famous malignant heterologous
NOTE Confidence: 0.91465926
00:48:51.445 --> 00:48:51.945 elements
NOTE Confidence: 0.6582031
00:48:52.245 --> 00:48:52.745 except
NOTE Confidence: 0.9941406
00:48:53.205 --> 00:48:53.945 well differentiated
NOTE Confidence: 0.961263
00:48:54.245 --> 00:48:54.745 liposarc
NOTE Confidence: 0.9866536
00:48:55.430 --> 00:48:57.210 will allow malignant categorization.
NOTE Confidence: 0.9412109
00:48:57.670 --> 00:48:59.130 All this is going to
NOTE Confidence: 0.9523926
00:48:59.430 --> 00:49:00.010 be summarized
NOTE Confidence: 0.9358724
00:49:00.470 --> 00:49:02.010 also in a
NOTE Confidence: 0.89677507
00:49:02.390 --> 00:49:04.790 review article that is, impressed
NOTE Confidence: 0.89677507
00:49:04.790 --> 00:49:05.530 in histopathology
NOTE Confidence: 0.9036865
00:49:06.550 --> 00:49:07.770 that, highlights
NOTE Confidence: 0.962972
00:49:08.310 --> 00:49:09.830 some of these changes I
NOTE Confidence: 0.962972

00:49:09.830 --> 00:49:11.175 just mentioned to you.
NOTE Confidence: 0.9617513

00:49:11.975 --> 00:49:13.735 There are many other subtle
NOTE Confidence: 0.9617513

00:49:13.735 --> 00:49:15.175 changes. I didn't have I
NOTE Confidence: 0.9617513

00:49:15.175 --> 00:49:16.695 don't have the time to
NOTE Confidence: 0.9617513

00:49:16.695 --> 00:49:17.835 go over them,
NOTE Confidence: 0.96644425

00:49:18.295 --> 00:49:19.495 but I want to thank
NOTE Confidence: 0.96644425

00:49:19.495 --> 00:49:20.855 you very much for your
NOTE Confidence: 0.96644425

00:49:20.855 --> 00:49:21.975 attention. I know it's a
NOTE Confidence: 0.96644425

00:49:21.975 --> 00:49:23.355 very breast focused
NOTE Confidence: 0.9577637

00:49:23.735 --> 00:49:24.235 lecture.
NOTE Confidence: 0.97986555

00:49:24.780 --> 00:49:26.300 I hope you enjoyed it,
NOTE Confidence: 0.97986555

00:49:26.460 --> 00:49:28.780 and it's clear and, useful
NOTE Confidence: 0.97986555

00:49:28.780 --> 00:49:30.219 in your practice. Thank you
NOTE Confidence: 0.97986555

00:49:30.219 --> 00:49:30.960 very much.
NOTE Confidence: 0.95751953

00:49:35.980 --> 00:49:37.360 Thank you for that wonderful
NOTE Confidence: 0.82520294

00:49:37.660 --> 00:49:39.739 experience of what's all coming

NOTE Confidence: 0.82520294
00:49:39.739 --> 00:49:41.185 up. And I
NOTE Confidence: 0.8785924
00:49:41.565 --> 00:49:42.445 like I don't know if
NOTE Confidence: 0.8785924
00:49:42.525 --> 00:49:43.665 Yeah. I
NOTE Confidence: 0.95377195
00:49:43.965 --> 00:49:45.325 like and look forward that,
NOTE Confidence: 0.95377195
00:49:45.325 --> 00:49:46.445 you know, it's no longer
NOTE Confidence: 0.95377195
00:49:46.445 --> 00:49:47.805 a requirement for the full
NOTE Confidence: 0.95377195
00:49:47.805 --> 00:49:49.344 house, which is too stringent.
NOTE Confidence: 0.99713135
00:49:49.885 --> 00:49:51.105 But is there any,
NOTE Confidence: 0.9928792
00:49:52.205 --> 00:49:54.205 mention or weightage given to
NOTE Confidence: 0.9928792
00:49:54.205 --> 00:49:54.525 different
NOTE Confidence: 0.8441162
00:49:55.530 --> 00:49:56.410 like, is,
NOTE Confidence: 0.94344074
00:49:56.890 --> 00:49:59.370 a permeator border weighted heavier
NOTE Confidence: 0.94344074
00:49:59.370 --> 00:49:59.870 than
NOTE Confidence: 0.9418248
00:50:00.410 --> 00:50:01.610 any of the other features
NOTE Confidence: 0.9418248
00:50:01.610 --> 00:50:02.350 like cellularity?
NOTE Confidence: 0.9745206

00:50:02.650 --> 00:50:03.850 Because right now, it's all
NOTE Confidence: 0.9745206

00:50:03.850 --> 00:50:05.130 equal weightage to all of
NOTE Confidence: 0.9745206

00:50:05.130 --> 00:50:05.630 them.
NOTE Confidence: 0.9448039

00:50:06.250 --> 00:50:07.290 Oh, yeah. You can keep
NOTE Confidence: 0.9448039

00:50:07.290 --> 00:50:09.050 it. I think, it's a
NOTE Confidence: 0.9448039

00:50:09.050 --> 00:50:09.765 great question.
NOTE Confidence: 0.91522896

00:50:10.404 --> 00:50:12.484 And, that's what actually the
NOTE Confidence: 0.91522896

00:50:12.484 --> 00:50:14.025 MRE group has tried
NOTE Confidence: 0.9546143

00:50:14.404 --> 00:50:16.244 to develop, you know, to
NOTE Confidence: 0.9546143

00:50:16.244 --> 00:50:18.344 give more emphasis to stroma,
NOTE Confidence: 0.8956706

00:50:18.724 --> 00:50:19.224 overgrowth,
NOTE Confidence: 0.5849067

00:50:19.765 --> 00:50:20.904 or marked nucleotypsya.
NOTE Confidence: 0.9523112

00:50:21.285 --> 00:50:22.265 But in reality,
NOTE Confidence: 0.96868896

00:50:23.610 --> 00:50:24.910 this is their experience.
NOTE Confidence: 0.9321289

00:50:26.650 --> 00:50:28.170 There is no study that
NOTE Confidence: 0.9321289

00:50:28.170 --> 00:50:28.670 has

NOTE Confidence: 0.50097656
00:50:30.170 --> 00:50:30.670 established
NOTE Confidence: 0.9660993
00:50:31.290 --> 00:50:32.970 the weight of all these
NOTE Confidence: 0.9660993
00:50:32.970 --> 00:50:34.030 different parameters.
NOTE Confidence: 0.85424805
00:50:34.570 --> 00:50:35.870 And actually in that publication
NOTE Confidence: 0.9892578
00:50:36.170 --> 00:50:36.910 that I
NOTE Confidence: 0.8742676
00:50:37.994 --> 00:50:38.494 showed,
NOTE Confidence: 0.990153
00:50:39.355 --> 00:50:40.895 where there was a consensus
NOTE Confidence: 0.990153
00:50:41.114 --> 00:50:41.614 group
NOTE Confidence: 0.8918457
00:50:42.315 --> 00:50:42.895 of experts,
NOTE Confidence: 0.9436849
00:50:43.594 --> 00:50:45.355 people were asked what is
NOTE Confidence: 0.9436849
00:50:45.355 --> 00:50:47.035 the most important feature and
NOTE Confidence: 0.9436849
00:50:47.035 --> 00:50:48.555 there was no agreement. So
NOTE Confidence: 0.9436849
00:50:48.555 --> 00:50:50.474 it's really difficult to to
NOTE Confidence: 0.9436849
00:50:50.474 --> 00:50:50.974 establish.
NOTE Confidence: 0.88671875
00:50:51.355 --> 00:50:51.855 Yes.
NOTE Confidence: 0.9645996

00:50:53.020 --> 00:50:54.000 Another question
NOTE Confidence: 0.89086914
00:50:54.540 --> 00:50:55.040 there.
NOTE Confidence: 0.82594806
00:50:56.540 --> 00:50:57.680 I I speak really loud.
NOTE Confidence: 0.82594806
00:50:57.740 --> 00:50:59.420 I can hear you. Oh,
NOTE Confidence: 0.82594806
00:50:59.420 --> 00:51:00.240 thank you.
NOTE Confidence: 0.936942
00:51:02.940 --> 00:51:03.900 Thank you so much. That
NOTE Confidence: 0.936942
00:51:03.900 --> 00:51:05.660 was an amazing presentation and
NOTE Confidence: 0.936942
00:51:05.660 --> 00:51:07.760 so practical, incredibly practical
NOTE Confidence: 0.92700195
00:51:08.664 --> 00:51:10.525 for breast pathologists in particular.
NOTE Confidence: 0.9709329
00:51:10.984 --> 00:51:12.184 Thank you very much. I
NOTE Confidence: 0.9709329
00:51:12.184 --> 00:51:13.065 I have a question with
NOTE Confidence: 0.9709329
00:51:13.065 --> 00:51:15.464 regards to the assessment of
NOTE Confidence: 0.9709329
00:51:15.464 --> 00:51:16.364 micro invasion
NOTE Confidence: 0.9411011
00:51:16.825 --> 00:51:18.585 as we we all suffer
NOTE Confidence: 0.9411011
00:51:18.585 --> 00:51:20.045 with how to
NOTE Confidence: 0.9961548
00:51:20.344 --> 00:51:22.204 objectively measure these areas.

NOTE Confidence: 0.8837348
00:51:24.800 --> 00:51:26.719 Now is clearly more objective,
NOTE Confidence: 0.8837348
00:51:26.719 --> 00:51:28.100 which we really appreciate.
NOTE Confidence: 0.98179406
00:51:28.800 --> 00:51:29.760 My question is, do you
NOTE Confidence: 0.98179406
00:51:29.760 --> 00:51:30.660 think that
NOTE Confidence: 0.9835205
00:51:31.120 --> 00:51:32.420 the differences in measurement
NOTE Confidence: 0.97631836
00:51:32.960 --> 00:51:34.560 that will be implemented will
NOTE Confidence: 0.97631836
00:51:34.560 --> 00:51:36.660 resort result in more chemotherapy
NOTE Confidence: 0.9773763
00:51:38.864 --> 00:51:40.085 treatment for patients?
NOTE Confidence: 0.9363281
00:51:42.065 --> 00:51:43.685 I don't know, but definitely
NOTE Confidence: 0.90431124
00:51:44.545 --> 00:51:46.545 I have mixed feelings about
NOTE Confidence: 0.90431124
00:51:46.545 --> 00:51:47.825 this in the case I
NOTE Confidence: 0.90431124
00:51:47.825 --> 00:51:49.505 showed where, you know, there
NOTE Confidence: 0.90431124
00:51:49.505 --> 00:51:50.565 were four
NOTE Confidence: 0.80163574
00:51:51.020 --> 00:51:52.160 different TLUs
NOTE Confidence: 0.91642255
00:51:52.859 --> 00:51:54.400 and, we measured
NOTE Confidence: 0.9680176

00:51:55.099 --> 00:51:55.839 all across
NOTE Confidence: 0.9343262

00:51:56.219 --> 00:51:57.739 because and we felt very
NOTE Confidence: 0.9343262

00:51:57.739 --> 00:51:59.040 strongly about that.
NOTE Confidence: 0.9671975

00:51:59.420 --> 00:52:01.420 But the original pathologist felt
NOTE Confidence: 0.9671975

00:52:01.420 --> 00:52:02.940 very strongly too that those
NOTE Confidence: 0.9671975

00:52:02.940 --> 00:52:04.640 were separate foci.
NOTE Confidence: 0.9884766

00:52:05.105 --> 00:52:06.484 I think it will result
NOTE Confidence: 0.9305827

00:52:06.785 --> 00:52:08.404 in a little bit of
NOTE Confidence: 0.9305827

00:52:08.464 --> 00:52:08.964 over,
NOTE Confidence: 0.99625653

00:52:09.585 --> 00:52:10.885 you know, staging
NOTE Confidence: 0.9914551

00:52:11.265 --> 00:52:12.224 of these cases.
NOTE Confidence: 0.9317336

00:52:12.785 --> 00:52:13.904 You showed me a case
NOTE Confidence: 0.9317336

00:52:13.904 --> 00:52:14.645 of microinvasive
NOTE Confidence: 0.882843

00:52:15.025 --> 00:52:17.025 lobular where there were tiny
NOTE Confidence: 0.882843

00:52:17.025 --> 00:52:18.404 little single cells
NOTE Confidence: 0.9267578

00:52:18.864 --> 00:52:19.844 scattered throughout

NOTE Confidence: 0.8805857
00:52:20.230 --> 00:52:21.910 a focus of, I think
NOTE Confidence: 0.8805857
00:52:21.910 --> 00:52:23.690 was either flogid or pleomorphic
NOTE Confidence: 0.8805857
00:52:23.910 --> 00:52:24.410 LCIS.
NOTE Confidence: 0.94455886
00:52:25.590 --> 00:52:27.350 There were like five cells
NOTE Confidence: 0.94455886
00:52:27.350 --> 00:52:29.430 here, three cells there, but
NOTE Confidence: 0.94455886
00:52:29.430 --> 00:52:31.190 if you did span the
NOTE Confidence: 0.94455886
00:52:31.190 --> 00:52:33.590 entire length, that becomes a
NOTE Confidence: 0.94455886
00:52:33.590 --> 00:52:34.410 half a centimeter
NOTE Confidence: 0.9580485
00:52:35.184 --> 00:52:36.545 focus of invasion. And I
NOTE Confidence: 0.9580485
00:52:36.545 --> 00:52:37.045 think
NOTE Confidence: 0.93414307
00:52:37.664 --> 00:52:39.424 there will be issues also
NOTE Confidence: 0.93414307
00:52:39.424 --> 00:52:40.645 related to that.
NOTE Confidence: 0.6357422
00:52:41.105 --> 00:52:41.605 The
NOTE Confidence: 0.9355469
00:52:42.065 --> 00:52:43.424 point is that if you
NOTE Confidence: 0.9355469
00:52:43.424 --> 00:52:44.325 have a DCIS
NOTE Confidence: 0.6777344

00:52:44.785 --> 00:52:45.285 with
NOTE Confidence: 0.9380697
00:52:45.664 --> 00:52:46.724 extensive DCIS,
NOTE Confidence: 0.95214844
00:52:47.184 --> 00:52:48.005 mass forming,
NOTE Confidence: 0.8821126
00:52:48.520 --> 00:52:50.200 and you find micro invasion
NOTE Confidence: 0.8821126
00:52:50.200 --> 00:52:51.560 in one focus and then
NOTE Confidence: 0.8821126
00:52:51.560 --> 00:52:53.420 another one and another one.
NOTE Confidence: 0.98832196
00:52:53.720 --> 00:52:55.000 Most likely there is a
NOTE Confidence: 0.98832196
00:52:55.000 --> 00:52:57.080 lot of invasion that is
NOTE Confidence: 0.98832196
00:52:57.080 --> 00:52:58.140 only limitedly
NOTE Confidence: 0.9980469
00:52:58.520 --> 00:52:59.020 sampled
NOTE Confidence: 0.83843994
00:52:59.640 --> 00:53:01.355 and that's what prompted,
NOTE Confidence: 0.90393066
00:53:02.295 --> 00:53:03.195 that decision.
NOTE Confidence: 0.948622
00:53:03.495 --> 00:53:04.955 And it's actually the application
NOTE Confidence: 0.948622
00:53:05.175 --> 00:53:06.555 of the CAP guidelines
NOTE Confidence: 0.8701172
00:53:07.255 --> 00:53:08.395 where two tumors
NOTE Confidence: 0.99365234
00:53:08.695 --> 00:53:09.755 that are

NOTE Confidence: 0.9873047
00:53:10.055 --> 00:53:10.555 separated
NOTE Confidence: 0.8631999
00:53:11.255 --> 00:53:12.635 five millimeters apart,
NOTE Confidence: 0.9099121
00:53:13.015 --> 00:53:14.775 they are regarded as separate,
NOTE Confidence: 0.9099121
00:53:14.775 --> 00:53:15.515 but within
NOTE Confidence: 0.85678434
00:53:16.210 --> 00:53:18.370 five millimeter, they are measured
NOTE Confidence: 0.85678434
00:53:18.370 --> 00:53:18.870 together.
NOTE Confidence: 0.99780273
00:53:19.250 --> 00:53:20.930 So it's an extension of
NOTE Confidence: 0.99780273
00:53:20.930 --> 00:53:21.430 that.
NOTE Confidence: 0.48620605
00:53:22.290 --> 00:53:23.570 What if all about
NOTE Confidence: 0.9951172
00:53:24.530 --> 00:53:25.190 I mean,
NOTE Confidence: 0.8156776
00:53:26.050 --> 00:53:27.489 we measure something as four
NOTE Confidence: 0.8156776
00:53:27.489 --> 00:53:29.465 millimeters, but the one to
NOTE Confidence: 0.8156776
00:53:29.465 --> 00:53:30.425 itself is going to be
NOTE Confidence: 0.8156776
00:53:30.425 --> 00:53:32.425 low. And how accurate would
NOTE Confidence: 0.8156776
00:53:32.425 --> 00:53:33.085 be our
NOTE Confidence: 0.83719885

00:53:33.465 --> 00:53:34.505 biomarkers? And then if they

NOTE Confidence: 0.83719885

00:53:34.505 --> 00:53:35.085 start, like, in

NOTE Confidence: 0.5104719

00:53:35.705 --> 00:53:36.825 a lobular or in a

NOTE Confidence: 0.5104719

00:53:36.825 --> 00:53:37.645 deco knife

NOTE Confidence: 0.90993655

00:53:38.665 --> 00:53:39.864 on that, that's going to

NOTE Confidence: 0.90993655

00:53:39.864 --> 00:53:42.045 be Yeah. I I agree.

NOTE Confidence: 0.9954427

00:53:42.505 --> 00:53:43.485 Some of these

NOTE Confidence: 0.9291992

00:53:43.945 --> 00:53:44.445 topics

NOTE Confidence: 0.9604492

00:53:44.900 --> 00:53:46.200 were very discussed,

NOTE Confidence: 0.90568036

00:53:46.660 --> 00:53:48.040 and there was,

NOTE Confidence: 0.9831543

00:53:48.660 --> 00:53:50.440 this is a consensus statement.

NOTE Confidence: 0.8963068

00:53:50.820 --> 00:53:52.580 This is, we're going to

NOTE Confidence: 0.8963068

00:53:52.580 --> 00:53:54.660 use this for for some

NOTE Confidence: 0.8963068

00:53:54.660 --> 00:53:55.160 time.

NOTE Confidence: 0.94592285

00:53:56.420 --> 00:53:58.360 Also some discussion regarding

NOTE Confidence: 0.9944336

00:53:58.844 --> 00:54:00.945 EPC with high nuclear grade

NOTE Confidence: 0.84521484

00:54:01.565 --> 00:54:03.025 to call it DCIS.

NOTE Confidence: 0.9446343

00:54:03.885 --> 00:54:05.565 There was discussion also about

NOTE Confidence: 0.9446343

00:54:05.565 --> 00:54:07.425 that, but, you know,

NOTE Confidence: 0.9139753

00:54:08.685 --> 00:54:11.565 for the phylloidis tumor using

NOTE Confidence: 0.9139753

00:54:11.565 --> 00:54:12.305 four criteria,

NOTE Confidence: 0.9849609

00:54:13.030 --> 00:54:14.870 the five criteria were introduced

NOTE Confidence: 0.9849609

00:54:14.870 --> 00:54:16.870 in the prior WHO edition

NOTE Confidence: 0.9849609

00:54:16.870 --> 00:54:18.230 because it was thought that

NOTE Confidence: 0.9849609

00:54:18.230 --> 00:54:19.850 the criteria were too lax

NOTE Confidence: 0.9390869

00:54:20.230 --> 00:54:21.450 and people were diagnosing

NOTE Confidence: 0.9585449

00:54:21.990 --> 00:54:24.490 malignant phylloidis tumor too often.

NOTE Confidence: 0.94402754

00:54:25.430 --> 00:54:26.950 So, you know, we need

NOTE Confidence: 0.94402754

00:54:26.950 --> 00:54:28.545 to find a way to

NOTE Confidence: 0.94402754

00:54:28.545 --> 00:54:30.724 give us different weight probably

NOTE Confidence: 0.94402754

00:54:30.785 --> 00:54:32.565 to these different criteria.

NOTE Confidence: 0.98344284

00:54:33.185 --> 00:54:34.625 You have a question? Thank
NOTE Confidence: 0.98344284

00:54:34.625 --> 00:54:35.744 you so much for the
NOTE Confidence: 0.98344284

00:54:35.744 --> 00:54:37.105 wonderful talk. I think it's
NOTE Confidence: 0.98344284

00:54:37.105 --> 00:54:38.704 really, really helpful for the,
NOTE Confidence: 0.98344284

00:54:39.025 --> 00:54:39.844 daily practice.
NOTE Confidence: 0.9056803

00:54:41.040 --> 00:54:42.660 So I have two questions.
NOTE Confidence: 0.9056803

00:54:42.719 --> 00:54:44.260 First one is about EPC.
NOTE Confidence: 0.9056803

00:54:44.480 --> 00:54:45.680 As you mentioned, like, the
NOTE Confidence: 0.9056803

00:54:45.680 --> 00:54:47.140 EPC is in dolent
NOTE Confidence: 0.92578125

00:54:47.440 --> 00:54:47.940 invasive
NOTE Confidence: 0.8491211

00:54:48.400 --> 00:54:48.900 cancer,
NOTE Confidence: 0.95735675

00:54:49.280 --> 00:54:49.780 carcinoma,
NOTE Confidence: 0.9574219

00:54:50.320 --> 00:54:51.860 but behave like a DCIS.
NOTE Confidence: 0.7968852

00:54:52.160 --> 00:54:53.855 That's why we kinda, stated
NOTE Confidence: 0.7968852

00:54:53.855 --> 00:54:54.755 as a PTIS,
NOTE Confidence: 0.9482422

00:54:55.295 --> 00:54:55.795 DCIS.

NOTE Confidence: 0.9295829
00:54:56.494 --> 00:54:57.934 But I do encounter a
NOTE Confidence: 0.9295829
00:54:57.934 --> 00:54:59.535 few cases in the past,
NOTE Confidence: 0.9295829
00:54:59.535 --> 00:55:00.674 at least two cases.
NOTE Confidence: 0.88041854
00:55:01.295 --> 00:55:03.234 It's beautiful, beautiful like EPC,
NOTE Confidence: 0.88041854
00:55:03.454 --> 00:55:05.214 low to intermediate grade, a
NOTE Confidence: 0.88041854
00:55:05.214 --> 00:55:06.035 year positive,
NOTE Confidence: 0.9951172
00:55:06.480 --> 00:55:06.980 totally
NOTE Confidence: 0.885064
00:55:07.360 --> 00:55:08.640 fine. But we see a
NOTE Confidence: 0.885064
00:55:08.640 --> 00:55:10.020 couple of positive notes.
NOTE Confidence: 0.8978914
00:55:10.400 --> 00:55:11.760 So in that scenario we
NOTE Confidence: 0.8978914
00:55:11.760 --> 00:55:12.960 kind of like, uh-oh, so
NOTE Confidence: 0.8978914
00:55:12.960 --> 00:55:14.000 how should we do that?
NOTE Confidence: 0.8978914
00:55:14.000 --> 00:55:15.380 Because we cannot ignore,
NOTE Confidence: 0.9854981
00:55:15.680 --> 00:55:16.980 this is a positive note.
NOTE Confidence: 0.91589355
00:55:17.360 --> 00:55:18.660 So in that situation,
NOTE Confidence: 0.9563151

00:55:19.119 --> 00:55:21.005 I believe we kind of
NOTE Confidence: 0.9563151

00:55:21.005 --> 00:55:22.845 push over to the invasive
NOTE Confidence: 0.9563151

00:55:22.845 --> 00:55:25.025 cancers to be consistent to
NOTE Confidence: 0.87529296

00:55:25.325 --> 00:55:26.864 combine a finding a note.
NOTE Confidence: 0.87529296

00:55:27.005 --> 00:55:28.765 But somehow I feel like
NOTE Confidence: 0.87529296

00:55:28.765 --> 00:55:29.985 in that kind of scenario,
NOTE Confidence: 0.86413574

00:55:30.364 --> 00:55:32.605 it's very it's unusual, real
NOTE Confidence: 0.86413574

00:55:32.605 --> 00:55:33.105 situation.
NOTE Confidence: 0.94401044

00:55:33.885 --> 00:55:35.505 What's your, recommendation
NOTE Confidence: 0.81862384

00:55:35.859 --> 00:55:36.900 when we're dealing with the
NOTE Confidence: 0.81862384

00:55:36.900 --> 00:55:37.400 case?
NOTE Confidence: 0.8768485

00:55:38.660 --> 00:55:40.579 Thankfully they are rare, but
NOTE Confidence: 0.8768485

00:55:40.579 --> 00:55:41.239 I understand
NOTE Confidence: 0.8489583

00:55:41.540 --> 00:55:42.520 the the issue.
NOTE Confidence: 0.991333

00:55:43.060 --> 00:55:43.719 You know,
NOTE Confidence: 0.9268473

00:55:44.900 --> 00:55:46.820 in reality, EPC is an

NOTE Confidence: 0.9268473
00:55:46.820 --> 00:55:49.400 invasive carcinoma. We choose to,
NOTE Confidence: 0.90089923
00:55:50.195 --> 00:55:52.114 classify it as in situ
NOTE Confidence: 0.90089923
00:55:52.114 --> 00:55:52.435 but,
NOTE Confidence: 0.99934894
00:55:53.075 --> 00:55:54.455 it is possible
NOTE Confidence: 0.83447266
00:55:55.475 --> 00:55:56.755 that in Focali may have
NOTE Confidence: 0.83447266
00:55:56.755 --> 00:55:57.255 metastasized.
NOTE Confidence: 0.9884905
00:55:59.555 --> 00:56:01.315 Or there is another focus
NOTE Confidence: 0.9884905
00:56:01.315 --> 00:56:02.055 of invasion
NOTE Confidence: 0.948466
00:56:02.355 --> 00:56:04.320 anywhere else, somewhere else in
NOTE Confidence: 0.948466
00:56:04.320 --> 00:56:05.840 the breast that has not
NOTE Confidence: 0.948466
00:56:05.840 --> 00:56:06.740 been sampled.
NOTE Confidence: 0.97700197
00:56:07.520 --> 00:56:09.300 Or even in the sections
NOTE Confidence: 0.97700197
00:56:09.360 --> 00:56:10.960 that we put through, in
NOTE Confidence: 0.97700197
00:56:10.960 --> 00:56:12.400 the deeper section, there could
NOTE Confidence: 0.97700197
00:56:12.400 --> 00:56:13.680 be a focus of frank
NOTE Confidence: 0.97700197

00:56:13.680 --> 00:56:15.780 invasion that has not been
NOTE Confidence: 0.96022725

00:56:16.425 --> 00:56:18.344 put on the glass. So,
NOTE Confidence: 0.96022725

00:56:18.344 --> 00:56:20.105 yeah, we report whatever we
NOTE Confidence: 0.96022725

00:56:20.105 --> 00:56:20.605 have
NOTE Confidence: 0.966762

00:56:21.385 --> 00:56:23.145 and, you know, the patient
NOTE Confidence: 0.966762

00:56:23.145 --> 00:56:23.545 will be
NOTE Confidence: 0.9484488

00:56:25.465 --> 00:56:26.905 it's a hard it's a
NOTE Confidence: 0.9484488

00:56:26.905 --> 00:56:28.185 hard one. I think the
NOTE Confidence: 0.9484488

00:56:28.550 --> 00:56:29.609 one cannot ignore
NOTE Confidence: 0.99975586

00:56:30.150 --> 00:56:30.969 the positivity
NOTE Confidence: 0.9776204

00:56:31.349 --> 00:56:33.109 of the lymph nodes and
NOTE Confidence: 0.9776204

00:56:33.109 --> 00:56:33.609 probably
NOTE Confidence: 0.8353027

00:56:34.469 --> 00:56:36.390 considering that in this case,
NOTE Confidence: 0.86413574

00:56:36.790 --> 00:56:38.010 the we know that
NOTE Confidence: 0.9755249

00:56:38.390 --> 00:56:39.849 this is a tumor that
NOTE Confidence: 0.9755249

00:56:40.070 --> 00:56:41.050 is by convention

NOTE Confidence: 0.92020357
00:56:41.430 --> 00:56:42.825 in situ, but in reality
NOTE Confidence: 0.92020357
00:56:42.825 --> 00:56:44.465 is invasive. One can write
NOTE Confidence: 0.92020357
00:56:44.465 --> 00:56:45.605 a nice note
NOTE Confidence: 0.9355236
00:56:46.065 --> 00:56:47.185 and maybe send it for
NOTE Confidence: 0.9355236
00:56:47.185 --> 00:56:48.405 oncotype DX
NOTE Confidence: 0.76342773
00:56:49.345 --> 00:56:50.165 where they,
NOTE Confidence: 0.9602661
00:56:50.705 --> 00:56:52.085 you know, they can give
NOTE Confidence: 0.9602661
00:56:52.145 --> 00:56:53.525 some additional information.
NOTE Confidence: 0.9995117
00:56:54.065 --> 00:56:55.125 I have to say
NOTE Confidence: 0.87630206
00:56:55.425 --> 00:56:56.864 I don't have the time,
NOTE Confidence: 0.87630206
00:56:56.864 --> 00:56:57.364 but
NOTE Confidence: 0.83236694
00:56:58.900 --> 00:57:00.100 to I remove the slide.
NOTE Confidence: 0.83236694
00:57:00.100 --> 00:57:01.160 I have seen
NOTE Confidence: 0.9767252
00:57:01.620 --> 00:57:02.980 at least two cases with
NOTE Confidence: 0.9767252
00:57:02.980 --> 00:57:03.960 distant metastasis.
NOTE Confidence: 0.9812012

00:57:04.739 --> 00:57:06.100 One case was from a
NOTE Confidence: 0.9812012

00:57:06.100 --> 00:57:07.719 forty four year old woman,
NOTE Confidence: 0.8986119

00:57:08.180 --> 00:57:10.580 seventeen years later developed a
NOTE Confidence: 0.8986119

00:57:10.580 --> 00:57:11.400 bone mat.
NOTE Confidence: 0.97094727

00:57:12.035 --> 00:57:13.094 She had a bilateral
NOTE Confidence: 1

00:57:13.395 --> 00:57:13.895 mastectomy
NOTE Confidence: 0.88071287

00:57:14.594 --> 00:57:16.215 so the breast was gone
NOTE Confidence: 0.68859863

00:57:16.675 --> 00:57:16.915 but,
NOTE Confidence: 0.98441255

00:57:17.555 --> 00:57:18.675 and she was part of
NOTE Confidence: 0.98441255

00:57:18.675 --> 00:57:19.955 a study we did. And
NOTE Confidence: 0.98441255

00:57:19.955 --> 00:57:21.095 the second case
NOTE Confidence: 0.84350586

00:57:21.715 --> 00:57:22.115 is,
NOTE Confidence: 0.8652344

00:57:23.475 --> 00:57:24.935 a case from a man
NOTE Confidence: 0.83013445

00:57:25.480 --> 00:57:27.500 with EPC in the breast
NOTE Confidence: 0.83013445

00:57:27.560 --> 00:57:28.600 and he can, of course,
NOTE Confidence: 0.83013445

00:57:28.600 --> 00:57:29.500 a man and

NOTE Confidence: 0.97802734
00:57:30.040 --> 00:57:30.780 he developed
NOTE Confidence: 0.58361816
00:57:31.560 --> 00:57:32.220 the LungMet
NOTE Confidence: 0.9782715
00:57:33.400 --> 00:57:34.520 a few years later. I
NOTE Confidence: 0.9782715
00:57:34.520 --> 00:57:36.460 don't remember the time exactly.
NOTE Confidence: 0.9555664
00:57:36.840 --> 00:57:38.540 So I'm always very suspicious
NOTE Confidence: 0.9555664
00:57:38.760 --> 00:57:39.420 of EPC
NOTE Confidence: 0.9967448
00:57:39.800 --> 00:57:41.100 in young women
NOTE Confidence: 0.93619794
00:57:42.255 --> 00:57:43.775 because the information we have
NOTE Confidence: 0.93619794
00:57:43.775 --> 00:57:45.474 is about older women.
NOTE Confidence: 0.92352295
00:57:45.934 --> 00:57:47.295 But this woman was forty
NOTE Confidence: 0.92352295
00:57:47.295 --> 00:57:49.635 four, still pretty young, right,
NOTE Confidence: 0.92352295
00:57:49.855 --> 00:57:50.915 long life,
NOTE Confidence: 0.94554687
00:57:51.855 --> 00:57:53.750 left ahead of her, and
NOTE Confidence: 0.94554687
00:57:53.750 --> 00:57:55.349 also in men. I'm a
NOTE Confidence: 0.94554687
00:57:55.349 --> 00:57:57.369 little bit more suspicious based
NOTE Confidence: 0.94554687

00:57:57.430 --> 00:57:59.430 on this experience I've had.
NOTE Confidence: 0.94554687

00:57:59.430 --> 00:58:01.050 And they are invasive carcinoma,
NOTE Confidence: 0.95744324

00:58:01.670 --> 00:58:03.829 but they are classified as
NOTE Confidence: 0.95744324

00:58:03.829 --> 00:58:05.430 in situ. We'll see what
NOTE Confidence: 0.95744324

00:58:05.430 --> 00:58:07.349 happens now that we'll call
NOTE Confidence: 0.95744324

00:58:07.349 --> 00:58:07.849 also
NOTE Confidence: 0.9087219

00:58:08.475 --> 00:58:10.255 high nuclear grade lesions,
NOTE Confidence: 0.7998047

00:58:11.675 --> 00:58:12.495 in situ
NOTE Confidence: 0.94122994

00:58:13.035 --> 00:58:15.535 without any myoepithelial cells. Obviously,
NOTE Confidence: 0.94122994

00:58:15.755 --> 00:58:16.955 you may gather I was
NOTE Confidence: 0.94122994

00:58:16.955 --> 00:58:18.475 not too much in favor
NOTE Confidence: 0.94122994

00:58:18.475 --> 00:58:19.535 of it, but,
NOTE Confidence: 0.9519043

00:58:36.165 --> 00:58:37.785 But now it doesn't matter.
NOTE Confidence: 0.9519043

00:58:38.085 --> 00:58:40.085 But I actually tried to
NOTE Confidence: 0.9519043

00:58:40.085 --> 00:58:41.145 get cases
NOTE Confidence: 0.942749

00:58:41.525 --> 00:58:43.145 to put together a series

NOTE Confidence: 0.942749
00:58:43.365 --> 00:58:43.685 of,
NOTE Confidence: 0.96796876
00:58:44.165 --> 00:58:46.245 EPC like carcinomas with high
NOTE Confidence: 0.96796876
00:58:46.245 --> 00:58:47.945 nuclear grade or HER2 positive.
NOTE Confidence: 0.94348145
00:58:48.260 --> 00:58:49.480 They've all been treated
NOTE Confidence: 0.8413629
00:58:50.020 --> 00:58:51.559 as invasive carcinomas.
NOTE Confidence: 0.9350586
00:58:52.180 --> 00:58:52.680 So,
NOTE Confidence: 0.9277615
00:58:54.020 --> 00:58:56.099 it's hard also to to
NOTE Confidence: 0.9277615
00:58:56.099 --> 00:58:57.880 get, you know, events
NOTE Confidence: 0.8599679
00:58:58.420 --> 00:59:00.040 in this in this patient.
NOTE Confidence: 0.8599679
00:59:00.180 --> 00:59:01.395 Sure. Great.
NOTE Confidence: 0.87520343
00:59:01.935 --> 00:59:03.375 So second question is about
NOTE Confidence: 0.87520343
00:59:03.375 --> 00:59:04.435 the mucinous carcinoma.
NOTE Confidence: 0.91416425
00:59:05.135 --> 00:59:06.495 So mucinous is like a
NOTE Confidence: 0.91416425
00:59:06.495 --> 00:59:06.995 hypocellular
NOTE Confidence: 0.7832845
00:59:07.375 --> 00:59:08.355 and a hypercellular.
NOTE Confidence: 0.95779854

00:59:09.615 --> 00:59:11.055 So when I issued a
NOTE Confidence: 0.95779854

00:59:11.055 --> 00:59:12.035 report say,
NOTE Confidence: 0.95035803

00:59:12.335 --> 00:59:13.395 mucinous carcinoma,
NOTE Confidence: 0.96728516

00:59:13.855 --> 00:59:14.355 hypercellular
NOTE Confidence: 0.95458984

00:59:14.735 --> 00:59:15.235 type,
NOTE Confidence: 0.9430237

00:59:15.590 --> 00:59:16.710 And then I got, like,
NOTE Confidence: 0.9430237

00:59:16.710 --> 00:59:18.330 communication from oncologist.
NOTE Confidence: 0.9113548

00:59:19.110 --> 00:59:20.310 They are not happy about
NOTE Confidence: 0.9113548

00:59:20.310 --> 00:59:22.710 this way because maybe for
NOTE Confidence: 0.9113548

00:59:22.710 --> 00:59:24.150 insurance building issue, they are
NOTE Confidence: 0.9113548

00:59:24.150 --> 00:59:25.350 not able to send out
NOTE Confidence: 0.9113548

00:59:25.350 --> 00:59:26.090 the oncotype.
NOTE Confidence: 0.8129883

00:59:27.030 --> 00:59:28.090 And then I
NOTE Confidence: 0.75652206

00:59:28.855 --> 00:59:29.895 since then, I'm a kind
NOTE Confidence: 0.75652206

00:59:29.895 --> 00:59:30.775 of try to learn, or
NOTE Confidence: 0.75652206

00:59:30.775 --> 00:59:32.075 try to be more,

NOTE Confidence: 0.7140401
00:59:33.895 --> 00:59:34.935 change the way I sign
NOTE Confidence: 0.7140401
00:59:34.935 --> 00:59:36.055 out the IDC with immune
NOTE Confidence: 0.7140401
00:59:36.055 --> 00:59:36.795 system differentiation.
NOTE Confidence: 0.9606236
00:59:37.255 --> 00:59:38.715 But I do some research
NOTE Confidence: 0.9606236
00:59:38.775 --> 00:59:39.995 to, to,
NOTE Confidence: 0.9279243
00:59:40.580 --> 00:59:41.940 to look at literature to
NOTE Confidence: 0.9279243
00:59:41.940 --> 00:59:43.880 compare the mucinous carcinoma
NOTE Confidence: 0.8336589
00:59:44.180 --> 00:59:44.680 hypercellular
NOTE Confidence: 0.79470485
00:59:45.380 --> 00:59:47.860 versus IDC with, with hype,
NOTE Confidence: 0.79470485
00:59:47.940 --> 00:59:49.080 with the mucinous differentiation.
NOTE Confidence: 0.9908203
00:59:50.020 --> 00:59:51.640 They do show some similar,
NOTE Confidence: 0.9239502
00:59:52.420 --> 00:59:54.260 overlapping things. So I don't
NOTE Confidence: 0.9239502
00:59:54.260 --> 00:59:54.760 know.
NOTE Confidence: 0.85279727
00:59:55.375 --> 00:59:57.135 So so I don't know
NOTE Confidence: 0.85279727
00:59:57.135 --> 00:59:58.335 what I should stick to,
NOTE Confidence: 0.85279727

00:59:58.335 --> 01:00:01.315 say, mucinous carcinoma, hypersolar type,
NOTE Confidence: 0.85279727

01:00:01.615 --> 01:00:03.375 or just, like, be general
NOTE Confidence: 0.85279727

01:00:03.375 --> 01:00:04.895 to say, IDC was mucinous
NOTE Confidence: 0.85279727

01:00:04.895 --> 01:00:05.395 differentiation.
NOTE Confidence: 0.8918328

01:00:07.290 --> 01:00:08.250 So if it is a
NOTE Confidence: 0.8918328

01:00:08.250 --> 01:00:10.250 mucinous carcinoma and you are
NOTE Confidence: 0.8918328

01:00:10.250 --> 01:00:12.570 convinced, I personally, I don't
NOTE Confidence: 0.8918328

01:00:12.570 --> 01:00:14.590 use hyper or hypocellular
NOTE Confidence: 0.796875

01:00:15.290 --> 01:00:16.350 I see. Qualification.
NOTE Confidence: 0.96191406

01:00:17.530 --> 01:00:18.910 There are two morphologic
NOTE Confidence: 0.8581543

01:00:19.690 --> 01:00:20.190 appearances,
NOTE Confidence: 0.81469727

01:00:20.810 --> 01:00:22.884 but both qualify as,
NOTE Confidence: 0.82124025

01:00:23.444 --> 01:00:25.545 new sinus carcinoma. Their hypercellular
NOTE Confidence: 0.99902344

01:00:26.164 --> 01:00:26.664 variant
NOTE Confidence: 0.98451453

01:00:27.285 --> 01:00:29.845 is oftentimes associated with solid
NOTE Confidence: 0.98451453

01:00:29.845 --> 01:00:30.984 papillary carcinoma

NOTE Confidence: 0.97908527
01:00:31.765 --> 01:00:34.265 and, can even show neuroendocrine
NOTE Confidence: 1
01:00:34.644 --> 01:00:35.144 differentiation
NOTE Confidence: 0.9406738
01:00:36.020 --> 01:00:37.619 just like a solid papillary
NOTE Confidence: 0.9406738
01:00:37.619 --> 01:00:39.640 carcinoma can do. But it
NOTE Confidence: 0.92248535
01:00:40.020 --> 01:00:41.400 it has a very,
NOTE Confidence: 0.93736047
01:00:42.740 --> 01:00:44.260 if it is properly class
NOTE Confidence: 0.93736047
01:00:44.500 --> 01:00:45.079 you know,
NOTE Confidence: 0.850057
01:00:45.460 --> 01:00:46.599 diagnosed, it's,
NOTE Confidence: 0.9190267
01:00:47.060 --> 01:00:48.359 a mucinous carcinoma.
NOTE Confidence: 0.96914065
01:00:48.900 --> 01:00:50.760 I wouldn't call it invasive
NOTE Confidence: 0.9975586
01:00:52.155 --> 01:00:52.895 breast carcinoma
NOTE Confidence: 0.86743164
01:00:53.995 --> 01:00:54.495 of,
NOTE Confidence: 0.7874731
01:00:56.235 --> 01:00:56.501 you know, NOS, NOS, NOS,
NOTE Confidence: 0.7874731
01:00:56.501 --> 01:00:58.504 NOS, NOS, NOS, NOS, NOS,
NOTE Confidence: 0.7874731
01:00:58.504 --> 01:01:00.940 NOS, NOS, NOS, NOS, NOS,
NOTE Confidence: 0.7874731

01:01:00.940 --> 01:01:01.955 NOS, NOS, NOS, NOS, NOS,
NOTE Confidence: 0.7874731

01:01:01.955 --> 01:01:02.472 NOS, NOS, NOS, NOS, NOS,
NOTE Confidence: 0.7874731

01:01:02.472 --> 01:01:03.665 NOS, NOS, NOS, NOS, NOS,
NOTE Confidence: 0.7874731

01:01:03.665 --> 01:01:05.055 NOS, NOS, N
NOTE Confidence: 0.82942706

01:01:08.140 --> 01:01:09.040 at this qualification
NOTE Confidence: 0.8935547

01:01:09.420 --> 01:01:09.660 that,
NOTE Confidence: 0.98227537

01:01:10.700 --> 01:01:12.380 according to the sixth edition,
NOTE Confidence: 0.98227537

01:01:12.380 --> 01:01:14.240 it shouldn't be ER positive
NOTE Confidence: 0.85406893

01:01:15.180 --> 01:01:17.660 or HER2 sorry. Shouldn't be,
NOTE Confidence: 0.9477539

01:01:18.300 --> 01:01:19.760 of high nuclear grade
NOTE Confidence: 0.9351981

01:01:20.405 --> 01:01:22.405 or HER2 positive. If you
NOTE Confidence: 0.9351981

01:01:22.405 --> 01:01:23.224 find that,
NOTE Confidence: 0.9389445

01:01:23.765 --> 01:01:25.065 don't call it mucinous.
NOTE Confidence: 0.96313477

01:01:26.085 --> 01:01:27.685 Yeah. Yeah. Thank you so
NOTE Confidence: 0.96313477

01:01:27.685 --> 01:01:29.065 much. It's really helpful.
NOTE Confidence: 0.9267578

01:01:30.085 --> 01:01:30.585 Alright.

NOTE Confidence: 0.76969403
01:01:30.885 --> 01:01:32.025 Any questions online?
NOTE Confidence: 0.8792318
01:01:37.150 --> 01:01:38.190 Oh, I don't know where
NOTE Confidence: 0.8792318
01:01:38.190 --> 01:01:40.050 is the chat. Unmute unmute
NOTE Confidence: 0.3677063
01:01:40.750 --> 01:01:41.410 the disabled.
NOTE Confidence: 0.5159912
01:01:44.350 --> 01:01:45.170 Once you
NOTE Confidence: 0.9468994
01:01:50.865 --> 01:01:52.165 I'm not seeing anything.
NOTE Confidence: 0.8616455
01:01:56.909 --> 01:01:58.289 I'm not seeing. Good. Okay.
NOTE Confidence: 0.9669095
01:01:58.589 --> 01:01:59.629 No. Thank you so much.
NOTE Confidence: 0.9669095
01:01:59.629 --> 01:02:00.989 Thank you. Thank you all
NOTE Confidence: 0.9669095
01:02:00.989 --> 01:02:01.969 for your attention.
NOTE Confidence: 0.6911621
01:02:02.589 --> 01:02:03.329 Thank you.