# August 2022 Open Meeting Transcript

**Dr. Angella Charnot- Katsikas**
OK, I have just started the recording of this open meeting in compliance with CMS.

**Dr. Angella Charnot- Katsikas**
For the record, prior to doing so, I announced that Palmetto GBA would make an audio recording of the open meeting and consent it on behalf of Palmetto GBA.

**Dr. Angella Charnot- Katsikas**
So again, good afternoon, everybody.

**Dr. Angella Charnot-Katsikas**
Umm. And that concludes our opening marks. I just want to open the floor to 3 speakers this afternoon.

**Dr. Angella Charnot-Katsikas**
We have Doctor Matthew Goldberg, Doctor Clay Cockerell and Doctor Alexander Witkowski.

**Dr. Matthew Goldberg**
Thank you.

**Dr. Angella Charnot-Katsikas**
I'm going to ask again that everybody who is not speaking to please mute yourself.

**Dr. Matthew Goldberg**
This is Doctor Goldberg speaking. Thank you for allowing us to join here at the open meeting.

**Dr. Matthew Goldberg**
Yes. And we welcome you and please provide your presentation.

**Dr. Matthew Goldberg**
Thank you. I'm just for housekeeping. Her clarity. Will there be a presentation of the material submitted, the PDF of the slides just?

**Dr. Angella Charnot-Katsikas**
Typically the slides. Do you have your slides available to share on the screen?

**Dr. Matthew Goldberg**
Umm.

**Dr. Matthew Goldberg**
I do where I have comments that are prepared that can complement the that the material that I submitted as well that I can simply present.

**Dr. Angella Charnot-Katsikas**
Yeah, please provide your presentation, whatever you have prepared.

**Dr. Matthew Goldberg**
OK. Give me just one second, then hold on one.

**Dr. Matthew Goldberg**
It will be difficult for me in this setup to actually run the presentation. My apologies.

**Dr. Matthew Goldberg**
If it's possible, can I proceed with my comments related to the PowerPoint slide submitted?

**Dr. Matthew Goldberg**
Exactly.

**Dr. Angella Charnot-Katsikas**
So what we have to do is it looks like our one of our administrators is looking to provide the slides that you have submitted and that's what we should be presenting today. So, give us just a moment.

**Dr. Angella Charnot- Katsikas**
Great.

**Dr. Matthew Goldberg**
OK. Thank you.

**Dr. Angella Charnot-Katsikas**
So Doctor Goldberg have, have you tried to already share your slides and it did not work for you?

**Dr. Matthew Goldberg**
The issue is just the one screen here with a PDF it's difficult to scroll the PDF like it would take me a second, but I can get the screen up in just a minute if it's easier for me to.

**Dr. Matthew Goldberg**
Present my screen with a PDF that I submitted to.

**Dr. Matthew Goldberg**
The multipacks.

**Dr. Matthew Goldberg**
Yep.

**Dr. Angella Charnot-Katsikas**
That's fine if it's the. If it's the exact information that you submitted prior. OK, it looks like we got it here. Perfect. All right.

**Dr. Matthew Goldberg**
Yeah. OK.

**Dr. Angella Charnot-Katsikas**
Let's go ahead.

**Dr. Matthew Goldberg**
If that's OK, I'll proceed just with. OK. Perfect. Thank you.

**Dr. Matthew Goldberg**
Alright, so I'll begin here. First off, just want to thank you for the opportunity to present during this multiaxial open meeting for the proposed LCD.

**Dr. Matthew Goldberg**
Molecular assays for the diagnosis of cutaneous Melanoma DL 39345 my name is Doctor Matthew Goldberg, a board-certified dermatologist and dermatopathologist and an assistant clinical professor of Dermatologist at the Icon School of Medicine at Mount Sinai. I really been disclosure is that I'm the medical director for Castle Biosciences, where I'm a paid employee and stockholder.

**Dr. Matthew Goldberg**
On this slide that's currently projected for background, Castle Biosciences is a company working to transform a patient management.

**Dr. Matthew Goldberg**
Your oncology by developing molecular diagnostic tests that provide clinicians with actionable information that address key questions and disease states with high unmet clinical needs, specifically including the fields of cutaneous oncology and ocular oncology.

**Dr. Matthew Goldberg**
Today I'll be focusing on the two diagnostic ancillary gene expression profile tests, or GEP tests. My path Melanoma and decision DX diff DX Melanoma that I will refer to as my path and diff DX during the presentation on next slide please.

**Dr. Matthew Goldberg**
At a high level.

**Dr. Matthew Goldberg**
For Castle biosciences agrees with this draft MOLDX foundational policy DL 39345 that replaces the test specific MolDX LCD DL 37923, providing coverage guidance for only my path, and it's important that this policy will continue to provide Medicare coverage for diagnostic ancillary GEP tests for primary Cutaneous Melanoma Neoplasms for which the diagnosis is equivocal or uncertain. The policy and associated billing and coding article designate that both my path and diff DX have met coverage criteria according to this policy.

**Dr. Matthew Goldberg**
Next slide please.

**Dr. Matthew Goldberg**
We agree with the MOLDX.

**Dr. Matthew Goldberg**
Designation of both my path and 50 X GP tests that have met the threshold of medical reasonableness and necessity for Medicare and are considered COVID tests under this policy in the draft LCD MolDX medical directors have appropriately reviewed the published evidence supporting the clinical validity and clinical utility of these assays and highlights how GEP testing provides a much needed objective ancillary diagnostic test that can complement the other subjective tools available to pathologists such as immunochemistry fish or second opinion consultation. It's also important to highlight that limitations of.

**Dr. Matthew Goldberg**
Billing one GEP test for a single lesion is consistent with castle biosciences policy. Further coverage and DL39345 is appropriately limited to specimens of uncertain willing to potential in clinical scenarios. When GEP results will influence important clinical management interventions in the setting of this broad agreement with the draft LCD Castle Biosciences recommending one revision to the draft coverage guidance to include board certified and board eligible pathologists and Dermatologists. As these two additional types of clinicians see.

**Dr. Matthew Goldberg**
And manage patients with these types of lesions today, restricting covered use of my path and diff DX to board certified and board eligible dramatic pathology trained specialties specialists inadvertently bars access to GBP testing for other board-certified specialists who can order GP appropriately within the intended use of both assays. Next slide please.

**Dr. Matthew Goldberg**
The draft LCD appropriately recognizes the unmet clinical need addressed by GEP testing of ambiguous monocytic neoplasms and multiple studies shown here support the diagnostic ambiguity remains a significant challenge for those interpreting skin biopsies and determining appropriate treatment plans for patients with Melanie neoplasms, this diagnostic ambiguity can lead to clinical management uncertainty over and under treatment and complex conversations with patients regarding treatment and follow up next slide please.

**Dr. Matthew Goldberg**
This slide contains a graphic with many of the peer reviewed, published manuscripts that respectively support the clinical need, clinical validity, and clinical utility of my path and 50X and the evidence supporting each test is strong and is appropriately referenced in the draft LCD next slide please.

**Dr. Matthew Goldberg**
At every stage, pathologist interpreting skin biopsies endeavored to correctly classify Melanocytic lesion as a benign nevus versus malignant Melanoma. When reviewing the analytic Neoplasms and GEP is correctly considered as an objective diagnostic ancillary test that can inform this distinction seen here on the right side of this figure, the draft LCD mentions the NCCN guidelines and inclusion of GP testing and multiple guidelines, and subspecialty appropriate use criteria based on the published evidence

further supports these tests as medically reasonable and necessary for diagnostically equivocal millennial.

**Dr. Matthew Goldberg**
Like Neoplasms I'll add mention in these types of guideline documents is not a prerequisite for coverage but does reflect the strong evidence supporting GEP for these lesions. Next slide please.

**Dr. Matthew Goldberg**
The draft LCD also contains clear and appropriate language, limiting GEP testing to primary Cutaneous Melanocytic Neoplasms for which the diagnosis is equivocal or uncertain, and for which patients may be subjected to additional clinical interventions. This language highlighted in the red box here, will help to ensure that lesions appropriate for GEP testing are in fact the lesions being tested and that align with the intended uses of both my path and 50X. Next slide, please.

**Dr. Matthew Goldberg**
As I mentioned at the outset of these comments, Castle is in strong agreement with MoIDX draft LCD, but we recommend modifying the coverage guidance to include additional specialists who are also highly trained to appropriately order ancillary diagnostic GEP tests from the LCD language itself. The stated purpose of GEP testing is to assist dramatic pathologist to arrive at the correct diagnosis of Melanoma versus non-Melanoma when examining skin biopsies. However, there are other well qualified specialists who currently diagnose primary Cutaneous Melanocytic Neoplasms with equivocal.

**Dr. Matthew Goldberg**
Run certain malignant potential, specifically, anatomic pathologist routinely receives and diagnose skin biopsies, and in some instances, function is dermatopathologists in their care. Dermatologists also routinely integrate pathology reports into patient management plans, and in some instances also function as dermatopathologists in their review of slides. We believe that these clinicians should be able to submit my path or 50X orders that meet the Medicare criteria for medical reasonableness and necessity, as they're both highly trained specialists involved in diagnosis management.

**Dr. Matthew Goldberg**
Informing treatment decision.

**Dr. Matthew Goldberg**
For patients with continuous monitoring, Neoplasms with equivocal or uncertain Lynn potential at these clinicians can determine from their practice experience which patients are appropriate for testing and finally, based on current practice patterns, these clinicians are currently able to order in due order other diagnostic ancillary tests. Next slide please.

**Dr. Matthew Goldberg**
The schematic displayed on this slide depicts the process of clinical pathologic correlation, or CPC, that essentially is consolidating the Dermatologist and treating Dermatologists' impression of a clinical lesion into a clinical diagnosis to ensure that the final pathology report makes sense within the clinical context of the patient being treated and so that it is most useful for patient care. This process highlights 2 points in a patient's journey where diagnostic GP can aid in achieving clinical pathologic correlation and accurate diagnosis.

**Dr. Matthew Goldberg**

The first and the interpretation of ambiguous as to pathology by the pathologist reviewing the slides under a microscope and 2nd in rendering a clinical diagnosis, is the treating clinician incorporates the histologic diagnosis and the pathology report with other clinical information to establish the patient management plans that follow. Importantly, different providers lead these two important diagnostic steps and GEP can be incorporated by both the treating pathologists who provides the diagnostic interpretation and the treating clinician who incorporates the pathology report into actionable management plan.

**Dr. Matthew Goldberg**
Taking a step back for a second, dermatopathologists are not operating alone in their role to sign out challenging Melanocytic Neoplasms, and there's clear collaboration between the clinician treating the patient and the pathologist interpreting the patient skin biopsy to arrive at clinical pathologic correlation that ultimately informs patient management decisions such as additional surgeries and arsenal lifted biopsy. So, for the next several slides, I'll walk through the rationale to aid pathologists and dermatologists is covered ordering clinicians for GEP testing in Melanoma.

**Dr. Matthew Goldberg**
Pick me up blossoms.

**Dr. Matthew Goldberg**
And next slide please.

**Dr. Matthew Goldberg**
So first I'll discuss anatomic pathologists and you can move ahead to the next slide again.

**Dr. Matthew Goldberg**
Our next slide please.

**Dr. Matthew Goldberg**
So the clinical utility evidence cited in the draft LCD demonstrates clinical utility for Dermatopathologists. And while the majority of skin biopsies are interpreted by Dermatopathologists across the country, there are anatomic pathologists who regularly interpret skin biopsies and who can order other relevant ancillary tests such as industry, chemistry, fish, etcetera. There are clearly regional variations in the number of Dermatopathologists available to a particular community or group of patients. For example, rural areas have access to fewer dermatopathologists than do urban centers and some practices have established referral patterns that may or may not include.

**Dr. Matthew Goldberg**
The amount of ethologists, but the main point here is that there are pathologists who have developed significant expertise in interpreting skin biopsies, but who did not ever complete formal fellowship training and omni pathology. So, when a pathologist is reviewing and signing out cases for ambiguous or equivocal melanocytic neoplasms in this capacity, these pathologists are essentially functioning as dramatic pathologists and as such, the published clinical utility of GEP and ambiguous Melanocytic lesions for Dermatopathologists logically applies to such a pathologist working in the same capacity within established clinical workflows in their region.

**Dr. Matthew Goldberg**
Next slide please.

**Dr. Matthew Goldberg**
The figure on this slide maps out the process of clinical pathologic correlation again, and the white plus sign is located at the step where the pathologic interpretation takes place. And this is where Dermatopathologists and pathologists today work to interpret skin biopsies and where they can order diagnostic ancillary testing such as GEP for equivocal, melanocytic neoplasms. However, the LCD doesn't fully reflect this real-world workflow due to the fact that pathologists are not listed as covered ordering clinicians. So given the shared role of reviewing and interpreting skin biopsies, we support the inclusion of board certified and board eligible anatomic pathologists.

**Dr. Matthew Goldberg**
As well as board certified and board eligible Dermatopathologists as ordering clinicians for GEP testing in the final LCD. Next slide, please. And switching gears now to discuss the inclusion of Dermatologists ordering clinicians for GB testing will move to the next slide again.

**Dr. Matthew Goldberg**
Going back to the clinical utility data cited by the LCD, there's published evidence that demonstrates clinical utility of both my path and diff DX for Dermatopathologists as well as Dermatologists, multiple peer reviewed publications show treating clinicians can safely perform fewer reactions when equipped with a benign GEP result, which supports clinical utility for treating dermatologists by reducing unnecessary recessions. A benign Melanocytic Neoplasms for the benefit of patient care. Next slide please returning again.

**Dr. Matthew Goldberg**
So this schematic here of the clinical pathologic correlation process, here are the white plus simple corresponds to we're treating clinicians are closely involved with establishing the clinical diagnosis, as dermatologists are central members of the diagnostic team and are responsible for integrating pathology reports into clinical diagnosis that subsequently inform management decisions. For example, a treating Dermatologist may be the provider that first recognizes the clinical need for more diagnostic clarity. But this treating clinician may work with a pathologist who is either unfamiliar with.

**Dr. Matthew Goldberg**
Or as a late adopter of molecular diagnostics for ambiguous Melanocytic Neoplasms as the treating dermatologist is ultimately responsible for this clinical diagnosis and planning a re-excision versus forgoing a re-excision for particular lesion. It stands to reason that these treating dermatologists should be able to have diagnostic GEP orders covered by Medicare. There's a second white plus sign above in the location where the plus sign was positioned at a previous slide. And this is because board certified and board eligible dermatologists are also trained to be able to interpret their own skin biopsies.

**Dr. Matthew Goldberg**
So it's possible that a treating Dermatologist with therefore be in a position to complete a pathology report for a particular lesion order. Other ancillary tests to best define the lesion, and when dermatologists are essentially functioning as dermatopathologists, we believe that they should be able to have GP orders covered by Medicare as well. Next slide please.

**Dr. Matthew Goldberg**
So to summarize, the past seven slides Castle biosciences is supportive of a minor revision to the draft LCD because board certified and board eligible dermatopathologists, pathologists and dermatologists

are all skilled treating clinicians who should have access to ancillary diagnostic GP testing to improve diagnosis and management decisions for Medicare beneficiaries. Fundamentally, Castle does not believe that if the patient has a lesion interpreted by a non Dermatopathologist that they should be restricted from covered GEP testing and limiting coverage for both tests to Dermatopathologists alone.

**Dr. Matthew Goldberg**
We'll have unintended consequences that could include potential delays in diagnosis and treatment, equivocal diagnosis being signed out with unnecessary excision recommendations, or significant potential for missed Melanomas and potential unnecessary subjective consultations. If referral patterns are shifted based on provider and ability to submit COVID testing.

**Dr. Matthew Goldberg**
It's important to keep in mind that the appropriate clinical requirements for lesions suited to diagnostic ancillary testing that articulated in the coverage guidance in the draft LCD which serve to protect against inappropriate testing and as such adding pathologists and dermatologists to the LCD is beneficial for patients and will support appropriate testing. Our next slide please.

**Dr. Matthew Goldberg**
So in conclusion, Castle Biosciences supports this draft foundational LCD L39345 and the inclusion and coverage of both my path and diff DX in the policy based on the comprehensive literature review and high level of published evidence supporting these objective diagnostic tests.

**Dr. Matthew Goldberg**
The draft LC's limitations of billing one GEP test for a single lesion are consistent with Castle Biosciences policy and coverage and DL39345 is appropriately limited to specimens of uncertain length, potential and clinical scenarios where GEP results will influence important clinical management interventions. We do recommend treating board certified and board eligible pathologists and dermatologists as covered, ordering clinicians in the final LCD as these specialists currently diagnose and manage patients with equivocal monastic neoplasms.

**Dr. Matthew Goldberg**
And this reality is not reflected in the draft policy and restricting covered orders to only Dermatopathologists inadvertently parse access to GEP testing to these providers, it's again important to emphasize that the draft LCD coverage guidance on specimen inclusion and attended use language already restrict use of this test to specialist capable of determining when testing is appropriate. And so overall Castle supports the draft LCD that establishes a foundational policy where both my path and diff DX have met coverage criteria according to the LCD.

**Dr. Matthew Goldberg**
The single modification proposed in these comments is the addition of board certified and board eligible pathologists and dermatologists as treating clinicians who can also order covered GP test in addition to the currently listed board certified and board eligible dermatopathologists.

**Dr. Matthew Goldberg**
You understand?

**Dr. Matthew Goldberg**

Castle believes that the conclusion of these two additional specialists will support appropriate testing and specific text to suggestions will follow in our written comments prior to the close of the open comment period in the. In that comment, we'll also submit examples of LCD's that have less narrow restrictions on the ordering subspecialty, which could be seen as instructive guideposts to allow for the entire treatment team that manages patients with these equivocal or ambiguous Melanocytic Neoplasms, meaning that.

**Dr. Matthew Goldberg**
Dramatic pathologist pathologists and treating dermatologists to be able to order my path and 50 access cover tests. So, with that, thank you for the opportunity to present once again during the open meeting and I'll end there for any questions.

**Dr. Angella Katsikas**
Thank you, Doctor Goldberg. And with that we will continue with the next presentation from Doctor CockerelL.

**Dr. Clay J. Cockerell**
Yes, I have.

**Dr. Angella Charnot-Katsikas**
Right.

**Dr. Clay J. Cockerell**
Can you hear me, OK? Because I have the ability to share my slides. If you would like me to do that rather than you putting the PDF up.

**Dr. Angella Charnot-Katsikas**
If you're able to share, by all means, go ahead.

**Dr. Clay J. Cockerell**
I am able to share. I think you have to give me the permission to share, however.

**Dr. Angella Charnot-Katsikas**
OK. So, we'll see what our administrator has. The slides. She'll either share the slides or give you permission. Just give us one moment.

**Dr. Clay J. Cockerell**
OK, I think can you see those slides there?

**Dr. Angella Katsikas**
There you go. Yep, we see them. Thank you for sharing.

**Dr. Clay J. Cockerell**
OK. It's kind of a small screen. I don't know if we can make that into a full presentation or not.

**Dr. Clay J. Cockerell**
Let's see here. Now. Now they're getting over my head.

**Dr. Clay J. Cockerell**
Let's see. I'll just do it. I'll just that's a fairly small image, but we'll just go ahead and do that anyway. Well, thank you very much for letting the opportunity present. I'm going to say a lot of the same sort of things that Doctor Goldberg just said. I am a consultant for Castle Biosciences. I'm not receiving any compensation for the presentation today. And as opposed to Doctor Goldberg, I'm actually a practicing Dermatopathologist. I'm using this test pretty much daily in my practice and basically, we I'm an agreement that the LCD is a good one. This is something that.

**Dr. Clay J. Cockerell**
Does allow Medicare beneficiaries access to the testing, which I think is a very positive thing.

**Dr. Clay J. Cockerell**
However, I do think that there may be some limited situations where it it's probably beneficial to have non-Dermatopathologists and the ability to do this because it basically we're not the only ones that deal with these lesions in the real world.

**Dr. Clay J. Cockerell**
So basically, we I guess the question is why shouldn't anyone who's deals with these lesions, and this is a small subset of the universe of pigmented lesions that we deal with. By the way, the vast majority of lesions that we see are just easily diagnosed as Melanoma or as benign nevi. There's a small subset that are more equivocal and that these ambiguous ones that really require this type of testing. And currently these individuals have access to other types of tests, people that are that are doing this other than board certified board eligible dermatopathologists.

**Dr. Clay J. Cockerell**
But they're not really in this in this specific LCD would not be covered for using a better test if you will. And so, we really think that maybe they should have the opportunity to be able to order the test if possible. And just like Doctor Goldberg said, these tests are more objective than the current tests that are kind of routinely available, such as fluorescence inside terrorization, which requires a screening by a technician and then those slides and then presented to the pathologist and they're not as objective in that situation. We're not. We sort of get.

**Dr. Clay J. Cockerell**
We get to see what the tech sort of identified and sometimes is coming from a third party. It's not even coming from the physician himself, but this test is more objective. Basically, the tissue is submitted for analysis and there's actually an expression profile that says whether the lesion is more likely to be benign or malignant. And so, it's really a better objective test. There's two tests available currently that are being used commercially. One is the my path test. And again, you see that in this slide. It demonstrates approximately 23 genes analyzed. It comes up with a benign.

**Dr. Clay J. Cockerell**
Or malignant, or an indeterminate zone. So again, it's requires a clinician to take the information to interpret it and then incorporate it into the report, coupled with the histologic evaluation and then the diff DX test, which is a looks at 35 genes. These are different genes, again giving a similar type of report, and the two tests are complementary. Often one test will be performed in the other test is is then reflected into the test. So, these are two tests and they're used together to come up with.

**Dr. Clay J. Cockerell**
The more accurate information for rendering a diagnosis in these ambiguous lesions and these have been validated by many different studies. The clinical validity has been evaluated on what necessarily go through these various studies with you, the clinical validity and utility you're both have been validated for both of the two tests, so there's good data to show that these tests work. They're being used in clinical practice today and currently, as I said before, I'm using them literally every single day. And in my practice the.

**Dr. Clay J. Cockerell**
National organizations also now are recognizing the utility of these tests as well. And again, I'll just point out these are for their benign Melanocytic lesions. These are the tough situations where we see maybe the differential diagnosis putting an unusual, atypical Spitz tumor and Melanoma or maybe an unusual lesion that may be a very atypical dysplastic nevus versus a Melanoma that the excision of that lesion would be different.

**Dr. Clay J. Cockerell**
And especially in an individual of a relatively young age where it really makes a significant amount of difference, but also, it's very important in the Medicare population as well because we see a number of these, the most I'd say most common pigmented lesions that are possible Melanoma is arise in that setting. So, this is something that's really quite important for Medicare beneficiaries as well. And these three organizations all recognize GP as an important testing. Now Doctor Goldberg mentioned that being a board-certified dramatic pathologist, I'm dealing with these lesions every day.

**Dr. Clay J. Cockerell**
And you know many times a day. But there are settings where there are people who are not board certified or board else who may have a special expertise in this and or maybe in a setting where they really don't have access to a board-certified board elsewhere Dermatopathologist. And the only access might be to send it in consultation and while that's reasonably valuable in a lot of situations, once I get a case in consultation, I may still say well, this is still ambiguous. And so that I'm in order of the test at that point. So, if the clinician.

**Dr. Clay J. Cockerell**
Uh, back at the sort of before they sent it to me, is looked at it. Maybe they've consulted with the dermatologist, they ordered the test. It still ambiguous. They send it to me. I can then take that information that's submitted to me and integrate it at that point and come up with the most accurate diagnosis for them. So having them had the ability to use it in this limited situation in this relatively small number of cases, I don't think it really puts the test at risk of being overutilized these clinicians. They're very few of them that really feel super comfortable at diagnosing these ambiguously lesions just on their own.

**Dr. Clay J. Cockerell**
And the ones that they do, I would like to have all the tools available to them to make the most accurate diagnosis they can. So, I think that if we open this up and allow these relatively limited situations where

they can order it in rural setting or setting where really don't have access to a consultant dramatic pathologist, it's not going to really sort of open the floodgates, if you will, to the overutilization of a test like this. And there are a number of dermatologists also who are dermatologic oncologist who see these patients and maybe they've gotten an ambiguous diagnosis from a pathologist, and they say, well, wait a minute, you know, if we could get this test done, we could get a more accurate diagnosis right now.

**Dr. Clay J. Cockerell**
Maybe they see the patient. Maybe they really think it's a Melanoma. They don't have a diagnosis of 1. Getting something like this test available to them just at the local level, that can solve the problem relatively easily and it doesn't really have to be sent off for a third party and consultation, which adds to the cost. So, there are ways that this can be used in an appropriate setting where you don't really have just a board-certified board elsewhere. Dermatologist on site. Here's a good example of where this actually happened in our practice not too long ago, this was a 69-year-old gentleman who.

**Dr. Clay J. Cockerell**
Came in with an unusual lesion to a Dermatologist. I was submitted as just rule out atypical lesion. They really weren't sure what it was. The Histology showed an unusual, atypical lesion. They didn't order the test on it, and the dermatologist said, well, you know, this test is available. Why don't we get it? They did get the test on it. The result did come back that favored the diagnosis of a malignancy that allowed the diagnosis to be made of Melanoma. Unequivocally. The patient that underwent an appropriate surgical procedure at that time. So that was a good example of where.

**Dr. Clay J. Cockerell**
The test was used and that setting to come up with an accurate diagnosis was dealt with at the local level. It didn't really require secondary opinion or anything like that, so it does show how this can be helpful for Medicare beneficiaries this situation. So, the value of these tests in summary is very well proven. It's well recognized as being used daily in practice, and I think coverage for this in the Medicare situation is certainly we would, it's something we're very glad that we have available to us. But I think in a situation where we have the appropriate.

**Dr. Clay J. Cockerell**
Setting it's reasonable to allow non-board-certified board elsewhere. Dermatologists and pathologists use this test and again this is a relatively limited number of cases and the number of these leases that we see in the setting of all the pigmented lesions that we see to rule out Melanoma is relatively small. So, we think it's something that can be used in a reasonable fashion if it's if this is allowed to be included in the LCD.

**Dr. Clay J. Cockerell**
I'll be happy to answer any questions. I think anybody has those and thank you very much for letting me present today.

**Dr. Angella Charnot- Katsikas**
Great. Thank you, Doctor Cockerell.

**Dr. Angella Charnot- Katsikas**
And with that, let's continue with our next presentation by Doctor Witkowski.

**Dr. Alexander Witkowski**
Hi, good morning, good afternoon. Can you hear me clearly on my microphone?

**Dr. Alexander Witkowski**
Yes if.

**Dr. Angella Charnot- Katsikas**
Yes, we hear you clearly, but we don't see your slides yet. Can you go ahead and share?

**Dr. Alexander Witkowski**
Are you able to share the slides that I sent to you?

**Dr. Angella Charnot-Katsikas**
If you prefer that we share, we could, we can certainly do that, yes. Just give it. Give us a moment.

**Dr. Alexander Witkowski**
Please yes please if you can share it now and I'll just ask for advanced light when necessary.

**Dr. Angella Charnot-Katsikas**
Great. Doctor Cockerell, can you click stop share.

**Dr. Angella Charnot- Katsikas**
From your end please.

**Dr. Clay J. Cockerell**
Yeah, let me see. Uh, how you do that?

**Dr. Angella Charnot-Katsikas**
It should be at the at the top right of your screen.

**Dr. Clay J. Cockerell**
Yeah, there is that. Well, it says it says share, but it doesn't say at a stop share, which is kind of surprising. Let me see if I can.

**KARLA MALONEY**
Just.

**Dr. Clay J. Cockerell**
Why don't I just leave the session that easier?

**KARLA MALONEY**
You can just click share again and it'll stop sharing.

**Dr. Clay J. Cockerell**
Now I'm hitting share but unfortunately, it's not stopping sharing for some reason. I'm not sure what's going on, let me just see if I can exit out of the presentation.

**Dr. Clay J. Cockerell**
Maybe that'll stop it.

**Dr. Clay J. Cockerell**
And I didn't. Why don't I just leave the session? I don't want to belabor this, so thank you very much for letting me to present.

**Dr. Alexander Witkowski**
If you have about you and help on again.

**Dr. Angella Charnot- Katsikas**
OK, great. Thanks. Thanks for that. Doctor Cockerell, we look forward to rejoining the session in a moment. With that, it looks like we have Doctor Witkowski slides up and when you're ready, please go ahead and begin your presentation.

**Dr. Alexander Witkowski**
Excellent. Thank you very much for the opportunity to speak to everybody today. My name is Alexander Witkowski and I'm a practicing Dermatologist in Portland OR at the Oregon Health and Sciences University Department of Dermatology. Also, the Co-director of the Skin Imaging and Technology Center here at our department. I'm very familiar with this test. I'm using it several times per week. If you can please advance to the next slide.

**Dr. Alexander Witkowski**
These are my current disclosures and today I'm not being paid to participate in this meeting. Next slide please.

**Dr. Alexander Witkowski**
That you have.

**Dr. Alexander Witkowski**
So I'm speaking here today in regard to the Draft LCD MoIDX Molecular Assays for Diagnosis of Cutaneous Melanoma. The DL39345, I want to start by saying that I fundamentally agree with the position that both of these tests, the 23GP and the 35 GEP test commercially known as my path and Decision, DX diff DX should be available for Medicare beneficiaries.

**Dr. Alexander Witkowski**
Under a single LCD, I do think that the draft policy establishes appropriate coverage for these two GE pest GEP tests broadly, but I'm here specifically today because I have a single refinement or recommendation that I believe MoIDX should consider as this draft policy moves towards the final LCD.

**Dr. Alexander Witkowski**
I do believe that Dermatologist or inadvertently left out of the current wording of this draft policy, and I believe that this can be refined for the reason that Dermatologists are the primary point of care and the experts for diagnosis and treatment of Melanocytic Neoplasms. I'm not advocating that every dermatologist should order these tests, but I do believe that dermatologists like myself will have a specialty focus on managing patients with challenging melanocytic neoplasms should be able to be engaged with the decision to order these GEP tests.

**Dr. Alexander Witkowski**
This should certainly include Dermatologists, who use tools such as Dermoscopy or tools such as reflectance confocal microscopy, and I will give an example in today's talk Dermatologist as a whole work closely with Dermatopathology and our pathology colleagues, but we are ultimately responsible for the Council diagnosis and derive significant utility from objective GEP tests that may benefit our patients.

**Dr. Alexander Witkowski**
This describes my particular practice on a daily basis. There are those other dermatologists who performed the professional component of the diagnosis, and those are my colleagues who actually are dermatologists, but they read their own pathology slides and then order other relevant ancillary tests as they see appropriate in that particular context and setting. In fact, CMS does reimburse dermatologists for this professional component of reading slides, and I think that it stands to reason that if a clinician can be covered to read slides.

**Dr. Alexander Witkowski**
And order other diagnostic ancillary tests that they should be allowed to order GEP tests for the 23 and 35 gene tests. The bottom line is that both dermatopathologists and dermatology treating clinicians should be able to order these tests and are capable of determining which patient will benefit from testing. And then when this test is medically reasonable, and then of course necessary for the patient, you can advance to the next slide please

**Dr. Alexander Witkowski**
So on this slide, you can see what I call the armament of tools that I'm using on a daily basis and so everything on the left-hand side of the yellow line, or noninvasive tools that are pre biopsy and then where the actual 23 and 35 GEP tests come into play after the skin lesions or biopsies. So, you can see here tools such as dermoscopy A2 GEP adhesive patch that's an in vivo test and some other cases confocal microscopy is being used around the United States especially in highly specialized centers like

**Dr. Alexander Witkowski**
Like our own, these tools allow me to evaluate the lesion before the decision of the biopsy has been made. I, as the expert that utilize these tools to choose a use these tools to choose when I should be biopsy and when it is necessary to perform a shave or an excisional biopsy and help me to provide precision medicine to my patients after the biopsy is done, a specimen is sent to pathology. This is where these particular tests were discussing today. So, the 23 and 35.

**Dr. Alexander Witkowski**
GEP tests can be ordered to guide the correct and final diagnosis of a Melanoma versus a nevus by the interpreting pathologist. I believe that the need of these tests can be appropriately identified by the

Dermatology treating clinician such as myself after an equivocal or uncertain biopsy report is rendered for a patient, something I called a critical mismatch, and that specifically, is where I have a very high concern for Melanoma based on dermoscopic features that are very apparent.

**Dr. Alexander Witkowski**
Can combined potentially with confocal and then we have a critical mismatch with the initial result from the pathologist potentially due to sampling bias. If you could please advance to the next slide.

**Dr. Alexander Witkowski**
So advanced in vivo imaging tools may aid in pre biopsy decision making. However of course there is a broad consensus that advanced imaging does not benefit biopsy decision making and lesions with a very clear clinical diagnosis. As you can see here and these photos, I do not need a dramatic scope or adhesive patch test or a confocal microscope to test because the diagnosis of a benign congenital nevus is very clear on the left-hand side and then a diagnosis of an invasive Melanoma is also clear on the right.

**Dr. Alexander Witkowski**
On the right photo if you can advance the slide, please.

**Dr. Alexander Witkowski**
So, On the contrary, there is also a broad consensus that advanced imaging can benefit biopsy decision making and lesions with equivocal or uncertain clinical diagnostic criteria. So, in lesion such as the ones presented here with in these two photos, additional imaging modalities such as dermoscopy and confocal can be beneficial to inform decision making around the need to perform a biopsy. As a dermatologist, I am trying to know when these ancillary clinical decision-making tools.

**Dr. Alexander Witkowski**
Our propriate to use and when they're not appropriate to use. If you can advance to the next slide, please.

**Dr. Alexander Witkowski**
So I put this into a schematic. You can see this figure shows how Dermatologists use clinical tools to evaluate Melanocytic Neoplasms before biopsy and then on the right-hand side of this yellow bar. Dermatopathologist pathologist and dermatologist are all involved in the interpretation of subsequent skin biopsy and unpacking the clinical treatment plan that follows the receipt of the final pathology report in order to inform the management decisions for patients with equivocal and certain maleness of the Neal plastics.

**Dr. Alexander Witkowski**
But importantly for this particular presentation, even though germs Dermatologist and pathologists are all involved in these decisions, the current LCD DL39345 is only allowing Dermatopathologist utilize this particular testing for uncertain, equivocal, monocytic neoplasms please advance to the next slide

**Dr. Alexander Witkowski**
So here I'm giving comment about the LCD which appropriate appropriately covers Dermatopathologists ordering both 23 and 35 GEP tests. But I do think that there's an opportunity for consideration to allow other skin cancer specialists to also have access to have the ability to order these tests when there is

significant clinical ambiguity. This particular ambiguity occurs when the diagnosis between the Melanoma and non-Melanoma remains uncertain or equivocal after the initial pathology review.

**Dr. Alexander Witkowski**
Which could lead to potential overtreatment or undertreatment by the ultimate person who's responsible for the patient management, which is actually the dermatologist or the dermatology provider. But nine melanocytic neoplasms those mild or moderately dysplastic do not necessitate re-excision and clinical ambiguity frequently results in patients managed with surgical re-excision for non-melanomas because the treating dermatologist has some significant concern for missing a malignant Melanoma.

**Dr. Alexander Witkowski**
So This is why we see that 65% of physicians we excising mildly or moderately dysplastic nevi and published studies like the one presented here from 2014, this compares with the literature published and properly cited in the Draft LCD that does show that GEP testing with 23 and 35 GEP can reduce surgical management decisions again to avoid unnecessary relaxations for which I've noticed that my patients are very gracious as long as we're providing the high precision care to them.

**Dr. Alexander Witkowski**
And this is when Dermatology clinicians obtain a benign or a negative benign, which is in fact a negative gene expression profile result when using these 23 and 35 gene tests. Accurate diagnosis has inherent clinical utility to Dermatologists in my experience and a definitive diagnosis informs the way that I choose to manage my patient and it basically leads me in my management decision pathway how to properly treat these lesions advance to the next slide please.

**Dr. Alexander Witkowski**
So I won't belabor the data, but again, there is a clinical utility for both Dermatologists and Dermatopathologists to reduce unnecessary recessions in diagnostically challenging lesions with a benign GP result. Specifically, Dermatopathologists reduced recommendations to excise lesions with benign GP and dermatologists reduced decisions to perform excisions with benign GP from the published literature these three studies.

**Dr. Alexander Witkowski**
Uh contain the data on this slide already appropriately cited in the actual LCD. If you can please advance to the next slide.

**Dr. Alexander Witkowski**
So this is an excellent example of why I choose as the dermatologist to actually order go out of my way to order this particular test for my patient so you can see the central image contains an excerpt from a real pathology report that I that I received within this year and we, as dermatologists often receive clinically ambiguous reports and by design we have the advanced training to recognize cases with diagnostic and treatment uncertainty. And so, this is specifically as you can see here that in the upper yellow line I actually write for the.

**Dr. Alexander Witkowski**
Purpose of very crystal clear communication with the pathologist or Dermatologist I write why I chose to remove the lesion so you can see I have dermoscopic and confocal concern and then you can see the

initial result was a melanocytic nevus compound type with a typical features and then the actual recommendation in the notes section is to do clinical follow up the clinical follow up of the area and I want to put everybody in my shoes and in the shoes of a dermatologist when I see that. So, when I initially have very high concern with the Dermatoscope.

**Dr. Alexander Witkowski**
And I use confocal microscopy. This particular case and the result come back with what I call it, critical mismatch. I have to decide how will I follow up the area and unfortunately in this situation the pathologist did not make it clear. Should I monitor it with clinical photography which I do digital Dermoscopy should I do a deeper shape, a punch an excision? Those are unclear recommendations and that's why I chose to because I thought that this was a Melanoma. I chose to order this test. If you can please order.

**Dr. Alexander Witkowski**
Yeah, please advance to the next slide.

**Dr. Alexander Witkowski**
So why is this important? Please advance to the next slide.

**Dr. Alexander Witkowski**
Next. Uh. Perfect. Perfect. Yes, thank you. So, this is important because in this slide we're, I'm showing a workflow and a schematic with many different boxes and lines. This is a representation of the clinical workflow that our team has developed at this skin imaging and technology center at OHSU in Portland for lesions where we have or I'm having clinical and dermoscopic concern from Melanoma that actually integrates the proper use of 23 and 35 GEP testing. So importantly, you can see that GEP is.

**Dr. Alexander Witkowski**
Uh testing is positioned in this schematic for lesions, and that first, darker kind of light blue box for lesions with uncertain malignant potential, with different actionable patient management plans that follow a malignant positive team. He results you can see in red. So, in that setting, if we're receiving a malignant result, we're treating the lesion as if it is an at least a Melanoma on site to. So, with a 5-millimeter margin and then close follow up of the patient and then you can see in the green box if we receive a result that is.

**Dr. Alexander Witkowski**
Benign or negative? Then we're. Then we're treating this patient with a close follow up and depending on the circumstances where the smaller shape, if we have not removed all the pigment from that particular lesion, I think it's important to note that physicians do not order molecular diagnostics or other specialty tests if they do not have a plan for incorporating the actual results into their own treatment plans.

**Dr. Alexander Witkowski**
Or if they're unfamiliar with the technology at topic, just like with Dermoscopy and confocal tools, if you do not have a plan how to use the results of those techniques, then the Dermatologist will not spend the time and effort to actually perform those clinical moves. And this means that by definition, any physician interested in and ordering the test for GEP, 23 and 35 should have an anticipation to actually incorporate this. The result that they receive into their economical plan.

**Dr. Alexander Witkowski**
And is familiar with the way that they should actually manage their patient with equivocal or ambiguous Melanocytic plasm results, and this is our suggestion that's coming out in publication very soon. If you can please advance the slide.

**Dr. Alexander Witkowski**
And so yeah, if I one more slide, please. So, I'm gonna present just one brief example of using 2335 gene expression profile testing in a patient who is 62 years old. It's a female with a history of non-Melanoma skin cancer who had to come in for a neck up exam. And this slide shows two side by side images where the clinical photo on the left and the Dermoscopic photo on the right of a of a suspicious skin lesion that's pigmented on a chronically sun damaged skin of this patient. Again, close to Medicare age.

**Dr. Alexander Witkowski**
While concerning, given the Dermoscopic Perry, follicular hyperpigmentation of the skin lesion, I wanted still more information before making a biopsy decision. If you can advance the slide, please and so this is confocal microscope. This is a tool that allows us to see the cellular architecture very close resolution to a light microscope, except it's in the horizontal plane and it's used by a dermatologist bedside. I'm trained in this and have a PhD in this particular topic, you can advance the slide please.

**Dr. Alexander Witkowski**
And so you can see here that when I use this tool so first on the left you can see the dermoscopic image with perifollicular hyperpigmentation which on chronically sun damaged skin and an inability to rule out a separate keratosis for example, this could be an early Melanoma on site tone so the black and white image on the right is a confocal microscope image. What I want to highlight is that I can see individual populations of cells and high numerosity they're bright white, reflecting, aggregating around the poor or follicle.

**Dr. Alexander Witkowski**
And there are several of them that have definitively visible nuclei with the bright white side opsm, so there are presence of a typical cells aggregating around the follicle, which is typical for follicular tropism in an early Melanoma side to it. So, in the context of the concern and dermoscopy and confocal, I removed the lesion, if you could please advance the slide. And so, this is what I received in the initial pathology report was just a benign solar lentigo, absolutely no mention of a typical cells. And I don't fault the pathologist for this. It was a very, it was a smaller lesion.

**Dr. Alexander Witkowski**
But at the same time, typical cells were present and there was a critical mismatch from my concern in Dermoscopy and the tool that I have available with confocal and due to this critical mismatch, I did decide to order the 2335 GEP test assay. If you can please advance slide.

**Dr. Alexander Witkowski**
And so.

**Dr. Alexander Witkowski**
Thank you very much. And so given this critical, uh, mismatch, I ordered the GEP test and if you advance to the next slide, please.

**Dr. Alexander Witkowski**
OK. Yeah. And so, this you can see here that the pathologist took their result from GEP into consideration and then they changed their result and then it's been validated as a Melanoma inside too.

**Dr. Alexander Witkowski**
So given the critical mismatch, you know you utilizing this test, we were able to have a correct and final diagnosis of Melanoma site to which I believe is important for the patient to know that they're at it at a higher risk to develop another Melanoma. And also, that performing in the in some settings a shaved biopsy would be an inappropriate complete treatment. And even in the in this case the punch biopsy was not enough, and we had to make a larger excision of this particular lesion for complete and proper treatment. If you can advance to the next slide.

**Dr. Alexander Witkowski**
Please.

**Dr. Alexander Witkowski**
Yeah. And so, moving towards the end of my presentation, the draft LCD DL39345 sets out appropriate guardrails to avoid over testing. I advocate to include as ordering providers, the pathologist, the Dermatopathologist, but also a Dermatologist. And as I hope that my example, what would delineate why it's important to allow a Dermatologist to be able to order this test, all of us. So, the pathologist, the dramatic pathologist and a Dermatology clinic.

**Dr. Alexander Witkowski**
And we are all specialists trained to identify lesions that meet criteria set out by the LCD to ensure appropriate testing. The LCD should keep the existing draft language regarding cover GEP test ordered by Dermatopathologist. I'm not going to repeat it here, but I do want to let you know that I agree with the limitations that were set out in that initial draft policy, but patient access to GEP tests should not be limited by access, only to board certified and board eligible Dermatopathologists as other highly trained treating clinicians like myself.

**Dr. Alexander Witkowski**
Can also identify correctly and safely and appropriately. Lesions that qualify for 23 and 35 GEP testing. I could imagine potentially adding criteria that a dermatologist would need to meet certain criteria to identify lesions of clinical concern, maybe from the clinical history or the dermoscopic image. Maybe a consideration? Please advance to the next slide.

**Dr. Alexander Witkowski**
So on this last slide, in conclusion, Medicare already and trust dermatologists to pick tests before the biopsy, I believe that we can also be trusted to identify appropriate lesions for GEP test after the biopsy report is made in circumstances where there is a clinical mismatch as I showed in my example, the draft LCD appropriately covers both my path and diff DX for Medicare beneficiaries based on the published clinical validity that was presented by the previous provider and the clinical utility data.

**Dr. Alexander Witkowski**
This all aligns with ordering flow at our own particular institution. On use of these tests on a daily basis, the only area where I would voice my particular critique is that restricting the coverage only to dermatopathologists may miss the subset of expert treating clinicians, specifically dermatologists. That

should also have access to GEP testing to guide patient management decisions. Fundamentally, lesions are appropriate for GEP testing should be accessible and reimbursed for pathologists. They're not a pathologist.

**Dr. Alexander Witkowski**
And dermatologists alike. The task is clearly beneficial for Medicare patients, including my own patients, for whom my poor this test many times. And I hope that you will consider to add dermatologists to the updated LCD. With that, I'd like to thank you for your attention. And of course, if you could advance to that slide, please and draw your attention to our educational program. That is for providers and for patients. And just to reiterate my interest in Melanoma and finding these tumors early and precisely and 23GEP.

**Dr. Alexander Witkowski**
And many examples has helped us to make that correct diagnosis and treat the patients correctly. With that. Thank you very much for your attention

**Dr. Angella Charnot-Katsikas**
Great. Thank you very much, Doctor Witkowski. And with that, we conclude on open meeting today. We thank our speakers and our attendees. And with that we will stop recording and close the meeting.

**Dr. Angella Charnot-Katsikas**
Have a good afternoon, everyone.