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NCCN Cutaneous Melanoma Guidelines Panel

Submitted by:
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Date of request: 06232020
NCCN Guidelines Panel – Cutaneous Melanoma
Sent via email to: submissions@nccn.org

Regarding: NCCN Guidelines for Cutaneous Melanoma – Pigmented Lesion Assay

Dear NCCN Cutaneous Melanoma Panel Members:

I have served as the lead investigator for several clinical studies involving DermTech's Pigmented Lesion Assay. Please allow me to share my enthusiasm and rationale of recommending PLA use to guide biopsy decisions (requested change below) in the next version of NCCN's cutaneous melanoma guidelines based on the test's performance and clinical utility evidenced in 19 peer reviewed publications.

There have been a number of studies investigating the performance of various molecular analysis techniques (i.e., FISH, CGH, etc.); however, these techniques fall short of truly impacting pigmented lesion management because their performance characteristics and because the tests depend on tissue samples from surgical biopsies. The PLA is different. Not only are its performance characteristics superior – NPV of >99%, Specificity 69-91%, Sensitivity 91-95%, but the test reduces greatly the number of exploratory biopsies associated with pigmented lesion management.

Specific Changes: I recommend deleting the last sentence of the Evidence Block ME-11 on page 19 (pre-diagnostic clinical modalities). Based on the evidence available, please correct to: 'Pre-diagnostic noninvasive genomic patch testing should be considered to guide biopsy decisions."

FDA: CLIA test (and FDA compliant Class I device to non-invasively obtain samples via adhesive patches).

Rationale: The rationale for my recommendation is based on the PLA's confirmed clinical utility and performance (NPV of >99%, Specificity 69-91%, Sensitivity 91-95%) while greatly reducing the number of exploratory biopsies associated with pigmented lesion management.

I am providing key validation (Gerami - JAAD; Ferris - JID) and key utility (Ferris - DOJ; Brouha - JDD also detailed further below) peer reviewed publications to facilitate NCCN's efforts.

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Specifically, in my provided 12-month follow up study (Ferris et al., Impact on Clinical Practice of a Noninvasive Gene Expression Melanoma Rule-Out Test: 12-Month Follow-Up of Negative Test Results and Utility Data from a Large US Registry Study. DOJ, (2019), 25(5):2-8), we reviewed records of 734 pigmented lesions that had negative PLA results from 5 dermatology offices. Out of the 734 lesions with negative results, only 13 (1.8%) were biopsied and submitted for histopathologic review. None of those 13 lesions biopsied had a histopathologic diagnosis of melanoma. In normal practice, these 734 lesions likely would have been biopsied with a subset subjected to a wider margin excision. Where the PLA test results are followed, unnecessary biopsies and downstream complications are reduced or avoided.

In a recent, large real-world registry study, the PLA's performance and impact on clinical decision making is further validated. In Brouha et al. (Real-world utility of a non-invasive gene expression test to rule out primary cutaneous melanoma – a large US registry study, JDD, 2020; 19(3): 257-262), 90 providers evaluated 3,418 cases with the PLA. 90.52% of the PLA test on lesions clinically suspicious of melanoma were negative by PLA, and 9.48% were positive. Of 324 PLA (+) test results, 97.53% of those cases resulted in a surgical biopsy. Of the 3,094 PLA (-) test results, 0.06% of those cases resulted in a surgical biopsy. Avoidance of over 3,000 invasive, surgical procedures clearly evidences the impact the PLA has on pigmented lesion management and I recommend that the NCCN cutaneous melanoma guidelines be updated to reflect the now available evidence.

Sincerely,

Laura K. Ferris, MD, PhD