DEPARTMENT OF DERMATOLOGY
645 N Michigan Ave, Suite 1050
Chicago, IL 60611
Phone: (312) 503-5941
june-robinson@northwestern.edu

NORTHWESTERN
UNIVERSITY

June K. Robinson, MD
Research Professor of Dermatology

Submitted by:
Name: June K. Robinson, MD – Research Professor of Dermatology
Company/Organization: Northwestern University Feinberg School of Medicine, Department of Dermatology
Address: 645 N. Michigan Ave, Suite 1050, Chicago, IL 60611
Phone: 312-503-5941
Email: june-robinson@northwestern.edu
Date of Request: June 23, 2020
NCCN Guidelines Panel: Cutaneous Melanoma

June 23, 2020
To: NCCN Cutaneous Melanoma Panel; submissions@nccn.org
Re: DermTech's Pigmented Lesion Assay

Dear Members of the Committee:

When evaluating the Pigmented Lesion Assay (PLA), a non-invasive melanoma rule-out test, for favorable inclusion in the NCCN guidelines, I ask that you consider my perspective based on over 30 years of experience in managing the care of patients with pigmented skin lesions. I am a dermatologist and a Research Professor at Northwestern University Feinberg School of Medicine. My career has focused on early identification of skin cancer, especially melanoma.

I have had ample opportunity to train talented medical students, dermatology and primary care residents and fellows, and dermatology and primary care faculty members on how to perform skin examinations to detect melanoma. My research efforts also included the training of patients in skin self-examination. While one of my goals is to educate and make physicians aware of how to optimize the melanoma detection pathway, the existing standard of care (visual examination, biopsy and histopathology) is largely subjective and relies heavily on a clinician's level of education, past and current experience examining patients with melanoma, and training on and the availability of diagnostic tools (i.e., dermoscopy) and proficiency in using them.

It is critical to improve the diagnostic accuracy of both clinical and histopathological criteria to minimize the risk of harm related to screening at-risk patients for melanoma. Histopathologic diagnosis remains the gold standard but has proven limitations. A landmark study by Elmore and colleagues addressed the performance of dermatopathologists and pathologists in the evaluation of pigmented skin lesions (BMJ 2017; 357:J2813) and demonstrated poor intra-observer reproducibility (diagnostic accuracy) with up to 15% discordance across the spectrum of melanocytic skin lesions. The unexpected poor diagnostic accuracy for melanoma in situ and severely dysplastic nevi (40% accuracy), thin invasive melanoma (43% accuracy), and thick melanoma (72%) is the most concerning. It is important

to improve diagnostic accuracy to decrease false positives that may result in unnecessary surgery and psychological harm. It is critical to reduce the false negative diagnoses that may increase morbidity. This provides a solid rationale* for additional technologies to identify markers that can assist in diagnosis. Having a genomic test like the Pigmented Lesion Assay (PLA) that is based on about 20 searchable peer reviewed publications, helps address deficiencies of the existing care standard. I request NCCN consider the available evidence and I provide feedback in the required key categories below.

Requested Specific Changes (Relative to Version 3.2020, ME-11, Page 19): The pigmented lesion assay should be considered as a non-invasive test to guide the decision to perform a surgical biopsy in a difficult to assess melanocytic lesion (recommend deleting the last sentence of bullet point number 2).

FDA: The PLA is a CLIA, not an FDA administered test.

Rationale: Having a genomic test like the Pigmented Lesion Assay (PLA) that is based on about 20 searchable peer reviewed publications, helps address deficiencies of the existing care standard. Please see above for further details.*

My most recent research demonstrates that physician-supervised PLA skin sample collection by patients is a viable non-invasive specimen collection option further highlighting the PLA's applicability and versatility under both the traditional and transitioning teledermatology paradigms during the current coronavirus pandemic when many dermatology offices are unable to provide direct patient care.

The pre-biopsy PLA supports clinicians in efforts to provide objective diagnoses regardless of setting, which not only provides clinicians the comfort of missing fewer melanomas, it also reduces patient anxiety about the skin biopsy and enhances patient trust in physicians who provide care remotely to bridge the gap in providing physician surveillance for melanoma survivors in the clinical office.

I fully support incorporation of the PLA into the NCCN Guidelines and Evidence Blocks to aide clinicians in the diagnosis of pigmented skin lesions. The PLA avoids unnecessary biopsies, enables better diagnostic interpretation regardless of setting, and allows for consistent, objective results.

While I appreciate that the NCCN guidelines (version 2.2019) have concentrated on the management of cutaneous melanoma following pathologic diagnosis, it is time to reassess this position. If you have any questions regarding my request to include the PLA as a pre-diagnostic technology to inform the decision to biopsy in the next version of the cutaneous melanoma guidelines, please do not hesitate to contact me by email at june-robinson@northwestern.edu to set up a time to speak. In summary, my recommendation is: The pigmented lesion assay should be considered as a non-invasive test to guide the decision to perform surgical biopsies in difficult to assess melanocytic lesions.

Sincerely,

June K. Robinson, MD

The following articles are submitted in support of the proposed change (PDFs attached):

1 Elmore – BMJ 2017 (Pathology Comparator)	4 Ferris – DOJ 2019 (PLA Clin. Utility)
2 Gerami – JAAD 2017 (PLA Clin. Validation 1)	5 Brouha – JDD 2020 (PLA Clin. Utility)
3 Ferris – JID 2018 (PLA Clin. Validation 2)	6 Robinson – SKIN 2020 (PLA Clin. Utility)