

10th Asia-Pacific Dermatology Conference

November 28-29, 2016 Melbourne, Australia



Shaofeng Yan

Dartmouth Hitchcock Medical Center, USA

Application of molecular tools in diagnosis and treatment of cutaneous melanoma

Melanoma is one of the most aggressive types of skin cancer. Histopathological criteria sometimes may be inadequate in differentiating difficult melanocytic lesions. Treatment for advanced melanoma cases still remains elusive. New development in molecular testing technologies is useful for improving diagnosis. New therapeutic approaches based upon a growing understanding of the underlying molecular abnormalities have been used in advanced malignant melanoma recently. Single nucleotide polymorphism (SNP) microarray analysis can accurately detect copy number changes and aid in improving differentiation of malignant melanoma from benign melanocytic proliferation. Next-generation sequencing (NGS) technologies have enabled detection of key genetic mutations for targeted therapy. Here we share our experience of application of SNP microarray analysis in differentiation of malignant melanoma from benign melanocytic proliferation. Furthermore using NGS testing for a 50 gene panel, we have identified numerous variable mutations, which may represent potential targets for future therapies in patients with advanced melanoma.

Biography

Shaofeng Yan has received her MD degree from Peking Union Medical College and PhD degree from University of Washington at Seattle. She has completed Anatomic and Clinical Pathology Residency at Dartmouth Hitchcock Medical Center and a combined Harvard Dermatopathology Fellowship at Massachusetts General Hospital, Brigham Women's Hospital and Beth Israel Deaconess Hospital. She is currently the Director of Dermatopathology Section and Program Director of Dermatopathology Fellowship Program of the Department of Pathology at Dartmouth Hitchcock Medical Center.

shaofeng.yan@hitchcock.org