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NEWS

711 **CytoSource: Current Issues for Cytopathology**

Bryn Nelson

This news section is written by a medical journalist and offers *Cancer Cytopathology* readers timely information on events, issues, and personalities of interest to the subspecialty. This edition, Part 2 of a 3-part series, discusses the challenges faced by countries trying to build a medical tourism industry.

Published online 14 October 2014

CYTOPATHOLOGY HELP DESK

713 **Fine-Needle Aspiration in a Low-Resource Setting**

Pamela Michelow and Luvo Fatman

Published online 11 September 2014

EDITORIAL

715 **Lessons From Early Clinical Experience With the Afirma Gene Expression Classifier**

Jeffrey F. Krane

Early clinical experience with the Afirma gene expression classifier indicates potential limitations of the test in everyday practice. The Afirma test may have diminished utility for Hurthle cell lesions. Additional challenges include high test cost relative to repeat fine needle aspiration and the dependence of test performance on highly variable diagnostic thresholds in cytology and surgical pathology specimens.

See also pages 737-44.

Published online 13 August 2014

COMMENTARY

720 **Primary Human Papillomavirus Screening for Cervical Cancer in the United States—US Food and Drug Administration Approval, Clinical Trials, and Where We Are Today**

Ritu Nayar, Robert A. Goulart, Patricia G. Tiscornia-Wasserman, and Diane Davis Davey

The US Food and Drug Administration recently approved the additional indication of Primary Screening for the Roche cobas human papillomavirus test. This commentary includes an overview of the supporting clinical trial data, issues this approval will present for laboratorians, and proposed clinical management guidelines for abnormal screening results.

Published online 16 September 2014

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REVIEW ARTICLE

730 Available Resources and Challenges for the Clinical Annotation of Somatic Variations*Catherine I. Dumur*

This review focuses on the publicly available resources for the annotation of somatic variants found by next-generation sequencing (NGS) technologies applied to mutational analyses of tumor specimens in clinical settings. The characteristics of the existing databases as well as the ideal tools needed to comprehensively annotate mutations for the creation of clinically relevant reports for oncology are discussed.

Published online 8 August 2014

ORIGINAL ARTICLES

737 Implications of a Suspicious Afirma Test Result in Thyroid Fine-Needle Aspiration Cytology: An Institutional Experience*Ricardo R. Lastra, Michelle R. Pramick, Cody J. Crammer, Virginia A. LiVolsi, and Zubair W. Baloch*

A significant number of thyroid fine-needle aspiration cases are diagnosed as indeterminate by cytomorphologic evaluation. The Afirma gene expression classifier test aids in the characterization of these lesions by diagnosing them as benign or suspicious. Herein, the authors report their experience with the use of suspicious Afirma testing in a group of indeterminate thyroid fine-needle aspiration cases.

See also pages 715-9.

Published online 13 August 2014

745 Thyroid Fine-Needle Aspiration Cytology Performance Data of Neoplastic and Malignant Cases as Identified From 1558 Responses in the ASCP Non-GYN Assessment Program: Thyroid Fine-Needle Performance Data*Stan G. Eilers, Paula LaPolice, Perkins Mukunyadzi, Umesh Kapur, Amy Wendel Spiczka, Ajay Shah, Husain Saleh, Adebawale Adeniran, Amberty Nunez, Indra Balachandran, Jennifer J. Clark, and Larry Lemon*

Data from 1558 responses in the American Society for Clinical Pathology Non-GYN Assessment program for thyroid fine-needle aspirates from thyroid neoplasms and malignancies were evaluated for the correct diagnostic interpretation as well as classifying the incorrect responses into treatment-based groups (nonsurgical benign thyroid nodule, thyroid neoplasm, or malignancy). Participants generally performed well, except for the entities of follicular neoplasm and follicular variant of papillary carcinoma, which were challenging diagnoses to program participants.

Published online 9 June 2014

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751 **Molecular Characterization of 54 Cases of False-Negative Fine-Needle Aspiration Among 1347 Papillary Thyroid Carcinomas**

Agnese Proietti, Nicla Borrelli, Riccardo Giannini, Rossana Romani, Giancarlo Di Coscio, Francesca Quilici, Teresa Rago, Paolo Miccoli, Paolo Vitti, and Fulvio Basolo

The rate of false-negative cases on thyroid fine-needle aspiration was 1.3% (18 of 1347 cases) in the referral center. The addition of molecular analysis decreased the false-negative rate to 0.4% (5 of 1347 cases). These data suggest that the addition of *BRAF* and *Ras* mutation preoperative assessment may be helpful, but the cost benefit must be carefully evaluated.

Published online 9 June 2014

760 **p16^{INK4a} Overexpression Is Not Linked to Oncogenic Human Papillomaviruses in Patients With High-Grade Urothelial Cancer Cells**

Eric Piaton, Jean-Sébastien Casalegno, Anne-Sophie Advenier, Myriam Decaussin-Petrucci, Florence Mege-Lechevallier, Alain Ruffion, and Yahia Mekki

The study shows a low prevalence of oncogenic human papillomaviruses (HPVs) in the urine of patients with high-grade urothelial malignancy. In the tissue sections of tumors, p16^{INK4a} overexpression occurs in the absence of demonstrable HPV DNA, contrary to what is noted in gynecopathology.

Published online 28 July 2014

770 **Pancreatic Neuroendocrine Tumors: Accurate Grading With Ki-67 Index on Fine-Needle Aspiration Specimens Using the WHO 2010/ENETS Criteria**

Jessica M. Farrell, Judy C. Pang, Grace E. Kim, and Z. Laura Tabatabai

The precise and accurate grading of pancreatic neuroendocrine tumors is critical for predicting biologic behavior patient prognosis, and making informed decisions regarding patient management and treatment. Pancreatic neuroendocrine tumors can be accurately graded by analyzing the Ki-67 proliferation indices in fine-needle aspiration specimens.

Published online 9 July 2014

779 **Reliability of Immunostaining Using Pan-Melanoma Cocktail, SOX10, and Microphthalmia Transcription Factor in Confirming a Diagnosis of Melanoma on Fine-Needle Aspiration Smears**

Jessica Clevenger, Cicily Joseph, Marilyn Dawlett, Ming Guo, and Yun Gong

In the current study, SOX10 was found to have the highest detection rate for melanoma on cytology smears, followed by microphthalmia transcription factor (MITF) and pan-melanoma cocktail. The nuclear staining markers, SOX10 and MITF, appear to be more readily interpreted than pan-melanoma cocktail.

Published online 20 June 2014