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HAS THE RECENT LBC ROLLOUT TRAINING HIGHLIGHTED ANY SUBSEQUENT TRAINING NEEDS?

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Data gathered during SurePath roll-out training were analysed to determine areas of difficulties in identification and grading so that these could be addressed in subsequent training courses. Submitted responses for four consolidation and four performance sets were reviewed, removing any cases without an available full screening history, giving a total of 1246 slides. The responses for each slide were evaluated against the submitted result. A response consensus of 80% or greater was deemed to be acceptable. Some samples had been used to create several slides; the outcomes of these were also correlated.

Results: Confidence in grading of negative slides showed an improvement between consolidation (83%) and performance (93%) stage. However, the percentage of slides achieving consensus for low grade dyskaryosis did not improve – 72% versus 58%. There was no significant difference in consensus in the moderate and severe dyskaryosis grades between consolidation and performance review stages, although 80% consensus was not reached in either.

Discussion: Analysis showed that slides containing a high percentage of mildly dyskaryotic cells with large nuclei, but not an increased nuclear–cytoplasmic ratio were often overcalled and those containing both high and low grade dyskaryosis tended to be undercalled, thus giving poor consensus for both mild and moderate dyskaryosis in all sets. The results indicate that sensitivity is good but grading still remains a problem that needs to be addressed in the development of update courses.

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COMPARISON OF PRETECT™ HPV-PROOFER AND HYBRID CAPTURE 2 FOR HPV DETECTION WITH VIRAL LOAD ANALYSIS OF HPV16, HPV18 AND HPV33 E6/E7MRNA POSITIVE SPECIMENS

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Introduction: Human papillomavirus (HPV) testing of liquid based cytology (LBC) specimens may be useful as an adjunct to cervical screening. The performances of hybrid capture (hc2) for the detection of HPV DNA from 13 high-risk types and PreTect™ HPV-Proofer for the detection of oncogenic E6/E7 mRNA transcripts from high-risk HPV types 16, 18, 31, 33, and 45 in cervical LBC specimens were compared. This study forms part of the MicroActive Consortium funded under the EU sixth Framework *eHealth* Initiative.

Methods: Specimens (n = 299), representing the following cytological disease categories: normal (n = 60), borderline nuclear abnormalities (BNA) (n = 34), cervical intraepithelial neoplasia grade 1 (CIN1), (n = 121), CIN2 (n = 60), CIN3 (n = 24) were tested by hc2 and by PreTect™ HPV-Proofer. Viral load analyses were performed on HPV16 (n = 55), HPV33 (n = 13) and HPV18 (n = 9) samples positive by PreTect™ HPV-Proofer.

Results: Sixty-nine percent (205/299) of the cases were positive for HPV DNA by hc2 and 38% (112/299) of the cases were positive for E6/E7 mRNA by PreTect™ HPV-Proofer. Concordance rates between the two tests were high in CIN2 (67%), CIN3 (83%) and normal (88%) cytology cases and low in the BNA and CIN1 categories; (56% and 52%). The sensitivity and specificity of PreTect™ HPV-Proofer and the hc2 test for the detection of high-grade cytology (ie CIN2+) were 71.4% and 75.8% versus 100% and 43.7%, respectively. The PPV for PreTect™ HPV-Proofer was 97.6% for the detection of abnormal cytology. There was no correlation between HPV viral load and grade of cytology in HPV E6/E7 mRNA positive specimens.

Conclusion: PreTect™ HPV-Proofer may be more useful for triage and in predicting high-grade disease as it has a higher specificity and positive predictive value than hc2.

