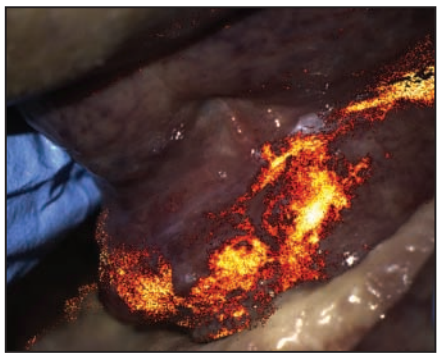
Cancer Prevention Research

Contents

May 2009
Vol 2, No 5

About the Cover

The cover image shows a false color map indicating areas most likely to contain neoplasia superimposed on a corresponding white-light photograph of a suspicious oral lesion (this image is a detail of the full oral-cavity image depicted on this page). The probability of neoplasia is computed from an autofluorescence image of the same site; the diagnostic algorithm was developed from clinical-study data involving autofluorescence images from 67 subjects. The map is color coded so that bright orange and white areas indicate areas with the highest probability of neoplasia; histologic analysis revealed that these areas corresponded to moderate dysplasia and carcinoma in situ. Autofluorescence image analysis highlighted areas of pathologically confirmed dysplasia and cancer, which were not readily visible under standard white-light inspection. Autofluorescence images in conjunction with a classification algorithm had 100 % sensitivity and 91.4 % specificity for discriminating dysplastic and cancerous lesion areas from normal areas. See articles by Roblyer *et al.* (beginning on page 423), Poh *et al.* (beginning on page 401), and Kelloff, Sigman and Contag (beginning on page 405) for more information.



Cancer Prevention Research

2 (5)

Cancer Prev Res 2009;2:401-502.