

Highlights

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Selected Articles from This Issue

miRNAs Distinguish Barrett's Esophagus from Esophageal Cancer

Drahos *et al.* _____ Page 429

The analysis of miRNAs may aid risk prediction in individuals diagnosed with Barrett's esophagus. Towards this goal, Drahos and colleagues examined whether certain miRNAs can positively distinguish esophageal adenocarcinoma (EA) from Barrett's esophagus. In a case-control study of 150 EA cases frequency-matched to 148 Barrett's esophagus cases, the authors observed 46 miRNAs significantly increased in EA compared with Barrett's esophagus. Three miRNAs were detected in greater than 80% EA and fewer than 20% of Barrett's esophagus, and several exhibited the most extreme differences in expression with >5-fold increases. These candidate miRNAs may provide a means for improved risk stratification and more cost-effective surveillance.

Obesity and IGF1R Expression and Endometrial Cancer Risk

Joehlin-Price *et al.* _____ Page 438

Obesity is a risk factor for endometrial carcinoma, and insulin-like growth factor 1 receptor (IGF1R) expression may influence this association. Joehlin-Price and colleagues performed IGF1R immunohistochemistry on a tissue microarray containing 894 endometrial carcinoma samples and scored according to staining to create immunoreactivity scores. The proportion of patients with high IGF1R expression increased as body mass index increased. These findings suggest a link between IGF1R endometrial carcinoma expression and obesity, as well as IGF1R expression and survival.

Ovarian Cancer Survival and Gene Variants

Winham *et al.* _____ Page 446

Numerous susceptibility loci for epithelial ovarian cancer (EOC) have been identified, but few associations have been reported with overall survival. Winham and colleagues assessed the contribution of rare coding region variants using data from the exome-based genotyping projects of the Ovarian Cancer Association Consortium. The primary patient set (Set 1) included 14 EOC studies and 227,892 variants, and a secondary patient set (Set 2) included six additional EOC studies and 114,620 variants. An SNP, rs8170, previously implicated to be associated with EOC risk and survival, showed the strongest evidence of association with EOC survival. Rare variants in *ATG2B*, an autophagy gene important for apoptosis, were also significantly associated with EOC survival.

Mammography Screening Decreases Breast Cancer Mortality

Massat *et al.* _____ Page 455

Massat and colleagues conducted a case-control study to assess the impact of mammography screening attendance on breast cancer mortality in an English population. Cancer registry cases who died from primary breast cancer (869 women) were matched to one or two general population controls with no diagnosis of breast cancer who were alive at the case's death. Attendance at breast screening resulted in a breast cancer mortality reduction of 39%, supporting that mammography screening is an important tool for reducing breast cancer mortality.