

# Highlights

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Selected Articles from This Issue

## ***TMPRSS2:ERG* Gene Fusions and Prostate Cancer Subtype**

Penney *et al.* \_\_\_\_\_ Page 745

The *TMPRSS2:ERG* gene fusion is the most common somatic event in prostate cancer. There is intriguing evidence that *TMPRSS2:ERG* represents a unique molecular subtype. Penney and colleagues examined the association of 39 prostate cancer genetic risk variants with *TMPRSS2:ERG* fusion positive and negative disease. Six of the variants were significantly differentially associated with fusion-positive versus fusion-negative disease. These findings suggest that the molecular events in prostate carcinogenesis may be distinct for men depending on their underlying genetic predisposition. When examining other risk factors for prostate cancer, the integration of molecular subtypes may improve understanding of the etiology of this disease.

## **Barrett's Esophagus Risk Model**

Sun *et al.* \_\_\_\_\_ Page 727

It is important to develop risk prediction models for individuals with Barrett's esophagus (BE) who are at increased risk of esophageal adenocarcinoma (EAC). Sun and colleagues developed a risk prediction model using singly ascertained BE pedigrees and multiplex BE pedigrees and incorporating family history and clinical risk factors. This study indicates that family information is valuable in predicting BE risk, and this new model will assist in both identifying high-risk individuals for BE screening and potentially reducing mortality from EAC.

## **Polyomavirus and Skin Cancer Risk**

Gossai *et al.* \_\_\_\_\_ Page 736

Little is known about the serostability of polyomaviruses (PyV) over time, or associations with cutaneous squamous cell carcinoma (SCC). In a case-control study, Gossai and colleagues measured antibody response against BK and JC. Among controls, BK and JC seroreactivity was stable over time, and there was little evidence of seroconversion following SCC diagnosis. JC seropositivity prior to diagnosis was associated with an elevated risk of SCC. A single measure of PyV seroreactivity appears a reliable indicator of long-term antibody status, and seropositivity to certain PyVs may be related to subsequent occurrence of SCC.

## **Residential Influences on Lung Cancer Survival**

Johnson *et al.* \_\_\_\_\_ Page 750

Johnson and colleagues examined the effects of residential segregation and deprivation on treatment and survival in non-small cell lung cancer patients living in the state of Georgia. Living in areas with high levels of segregation was associated with decreased odds of receipt of surgery. Black patients living in high residential segregation/high deprivation were 31% more likely to die, even after surgery was controlled for. For white patients, economic deprivation was associated with decreased odds of surgery but not survival, and residential segregation had no effect. This study suggests differences in how black and white individuals experience segregation and poverty lead to differences in adverse health outcomes.