

Microbiome and Esophagus and Stomach Cancer

Yu *et al.* _____ **Page 735**

Yu and colleagues examined the human upper digestive tract microbial community and two cancer-predisposing states: 1) serum pepsinogen I/pepsinogen II ratio (PGI/II), a predictor of gastric cancer risk, and 2) esophageal squamous dysplasia, a precursor of esophageal squamous cell carcinoma, in a cross-sectional design. The Human Oral Microbe Identification Microarray was used to test the microbiome. Lower microbial richness in the upper digestive tract was independently associated with both cancer-predisposing states in the esophagus and stomach.

The PAM50 for Breast Cancer Characterization

Sweeney *et al.* _____ **Page 714**

Caan *et al.* _____ **Page 725**

Two studies in this issue focus on PAM50, a gene expression-based assay for breast cancer intrinsic subtype evaluation. In one study, Sweeney and colleagues used PAM50 to evaluate tumors and found an overall subtype distribution of 53.1% luminal A, 20.5% luminal B, 13.0% HER2-enriched, 9.8% basal-like, and 3.6% normal-like. In a second study, Caan and colleagues used PAM50 to categorize tumors and examine risks of recurrence and mortality. The PAM50 assay categorized intrinsic subtypes more accurately and better predicted recurrence and survival, compared to commonly used immunohistochemical methods.

HPV Vaccination Uptake in Hispanic American Teens

Reiter *et al.* _____ **Page 742**

Hispanic females have the highest cervical cancer incidence rate of any racial or ethnic group in the United States. Reiter and colleagues examined human papillomavirus (HPV) vaccination uptake among a national sample of Hispanic adolescent females. Among this population, HPV vaccine initiation was 60.9%, completion was 36.0%, and follow-through was 59.1%. All vaccination outcomes were less common among participants without health insurance and vaccination did not differ by parents' preferred language. Many Hispanic females have not received the HPV vaccine, and HPV vaccination programs targeting Hispanics are needed.

Oral Contraceptives and Breast Cancer Risk

Beaber *et al.* _____ **Page 755**

Although the relationship between oral contraceptive (OC) use and breast cancer risk has been studied extensively, changes in OC hormonal components and a better understanding of the heterogeneity of breast cancer warrant a new look at this relationship. Beaber and colleagues conducted a case-control study of invasive breast cancer among women in the Seattle-Puget Sound area. Lifetime duration of OC use for ≥ 15 years was associated with an increased breast cancer risk, and there were no statistically significant differences in risk by OC preparation. Long-term use of contemporary OCs and current use for ≥ 5 years was associated with an increased breast cancer risk.