Inclusion of DHEAS and Mammographic Density in Risk Prediction Models for Breast Cancer

Gabrielson et al. | Page 574

Endogenous hormones and mammographic density are risk factors for breast cancer. Joint analyses of the two may improve the ability to identify high-risk women. Gabrielson and colleagues used the large, prospective KARMA study to evaluate the independence of DHEAS/DHEAS with mammographic density as risk factors for breast cancer as well as the joint and independent contribution of the hormones and density to the Gail, Tyrer–Cuzick, and CAD2Y risk prediction models. The results of this study showed DHEAS and percentage density to be independently and positively associated with breast cancer for postmenopausal women. Inclusion of DHEAS in current risk prediction models improved breast cancer discrimination among postmenopausal women not currently using menopausal hormone therapy. Combin- ing DHEAS and mammographic density could help identify women at high risk who may benefit from individualized breast cancer screening and/or preventive measures among postmenopausal women.

Overcoming Barriers to Biospecimen Collection among Spanish-Speaking Latina Breast Cancer Survivors

Samayoa et al. | Page 606

Minority underrepresentation in biomedical research hinders cancer disparities research. This study tested innovative strategies for biospecimen collection among 103 Spanish-speaking Latina breast cancer survivors in rural California. Community health workers used bilingual, multimedia materials to instruct participants on collecting saliva and hair over 3 days to measure biomarkers of stress (cortisol awakening response [CAR]; hair cortisol concentration) and premature aging (salivary DNA). Donation rates for salivary DNA, saliva for CAR, and hair were 98%, 89%, and 52%, respectively. Community-engaged, patient-centered, culturally tailored methods were effective in collecting biospecimens among vulnerable women and can advance cancer research discoveries that will benefit all populations.

Mouth-Level Nicotine Intake Estimates and Compensatory Smoking in Low Nicotine Cigarettes

Smith et al. | Page 643

The FDA is considering a mandated reduction in cigarette nicotine content. One concern is that once smokers are unable to purchase normal nicotine cigarettes, they may smoke more low nicotine cigarettes or smoke more intensely. This study by Smith and colleagues assessed whether smokers engaged in compensatory smoking by estimating the mouth-level nicotine intake of low nicotine cigarettes. Using a novel approach, the study assessed changes in smoking intensity for cigarettes smoked outside of the lab during the clinical trial by analyzing the cigarette butts of these cigarettes. There was no significant increase in number of cigarettes smoked or smoke exposure in the low nicotine condition. These data show that a nicotine reduction policy is unlikely to result in increased smoking to obtain more nicotine.

Risk of Leukemia after Dengue Virus Infection

Chien et al. | Page 558

Infections account for about 15% of human cancers globally. Dengue virus has been shown to infect blood stem cells in the bone marrow; however, the association between dengue virus infection and leukemia has not been investigated. By analyzing the National Health Insurance Research Database in Taiwan, Chien and colleagues found that people with previous dengue virus infection had a higher risk of leukemia. This finding suggests that dengue virus may be a potential oncovirus. Considering the rapidly increasing global incidence of dengue and the burden of leukemia, further studies are required to verify this finding.