LETTER FROM THE EDITOR

1 Catalyzing Cancer Prevention Research
   CaPR: A New Year/New Opportunities
   Scott M. Lippman

SPECIAL REPORT

2 Transforming Cancer Prevention through Precision Medicine and Immune-oncology
   Thomas W. Kensler, Avrum Spira, Judy E. Garber, Eva Szabo, J. Jack Lee, Zigang Dong,
   Andrew J. Dannenberg, William N. Hait, Elizabeth Blackburn, Nancy E. Davidson, Margaret Foti,
   and Scott M. Lippman

EDITORIAL

11 Risk Factor Models and Personalized Health: Opportunities and Challenges for Asymptomatic Individuals
   Frank L. Meyskens Jr
   See related article, p. 13

REVIEW

13 Risk Prediction Models for Colorectal Cancer: A Systematic Review
   Juliet A. Usher-Smith, Fiona M. Walter, Jon D. Emery, Aung K. Win, and Simon J. Griffin
   See related article, p. 11

RESEARCH ARTICLES

27 Plasma Inflammatory Markers and Risk of Advanced Colorectal Adenoma in Women
   Mingyang Song, Raaj S. Mehta, Kana Wu, Charles S. Fuchs, Shuji Ogino, Edward L. Giovannucci, and Andrew T. Chan

35 Methylseleninic Acid Superactivates p53-Senescence Cancer Progression Barrier in Prostate Lesions of Pten-Knockout Mouse
   Lei Wang, Xiaolan Guo, Ji Wang, Cheng Jiang, Maarten C. Bosland, Junxuan Liu, and Yibin Deng

43 Cancer-Specific Production of N-Acetylglaspasrate via NAT8L Overexpression in Non–Small Cell Lung Cancer and Its Potential as a Circulating Biomarker
   Tzu-Fang Lou, Deepa Sethuraman, Patrick Dospyo, Palleli Sivastava, Hyun Seok Kim, Joongsuu Kim,
   Xiaotu Ma, Pei-Hsuan Chen, Kenneth E. Huffman, Robin E. Frink, Jill E. Larsen, Cheryl Lewis,
   Sang-Won Um, Duk-Hwan Kim, Jung-Mo Ahn, Ralph J. Dellerzardins, Michael A. White, John D. Minna,
   and Hyuntae Yoo

53 Targeting mTOR and p53 Signaling Inhibits Muscle Invasive Bladder Cancer In Vitro
   Venkateshwar Madka, Altaf Mohammeed, Qian Li, Yuting Zhang, Laura Biddick, Jagan M.R. Patollo, Stan Lightfoot, Rhea A. Towner, Xue-Ru Wu, Vernon E. Steele, Levy Kopelovich, and Chinthalapally V. Rao

63 Preclinical In Vitro, In Vivo, and Pharmacokinetic Evaluations of FLLL12 for the Prevention and Treatment of Head and Neck Cancers
   Abu Syed Md Anisuzzaman, Abedul Haque, Mohammad Aminur Rahman, Dongsheng Wang, James R. Fuchs, Selwyn Hurwitz, Yuan Liu, Gabriel Sica, Fadlo R. Khuri, Zhuo (Georgia) Chen, Dong M. Shin, and A.R.M. Ruhul Amin

74 Anticancer and Cancer Prevention Effects of Piperine-Free Piper nigrum Extract on N-nitrosomethylurea-Induced Mammary Tumorigenesis in Rats
   Somchai Sriwiriyajan, Aman Tedasen, Narissara Lailerd, Pleumjit Boonyaphiphat, Anupong Nitruangjarat, Yan Deng, and Poichanalop Grailist

83 Uninterrupted Sedentary Behavior Downregulates BRCA1 Gene Expression
   Rachael Pettapiece-Phillips, Max Kooyar, Rania Chehade, Leonardo Salmena, Steven A. Narod, Mohammad Akbari, Igor Jurisica, and Joanne Kotsopoulos

89 A Presurgical Study of Oral Silybin-Phosphatidylcholine in Patients with Early Breast Cancer
   Matteo Lazzaroni, Aliana Guerrieri-Gonzaga, Sara Gandini, Harriet Johansson, Davide Serzano, Massimiliano Cazzaniga, Valentina Aristoro, Antonella Pucci, Serena Mora, Pietro Caldarella, Gianmatteo Pagani, Giancarlo Pruneri, Antonella Riva, Giovanna Petrangolini, Paolo Morazzoni, Andrea DeCensi, and Bernardo Bonanni
Persistence of Bronchial Dysplasia Is Associated with Development of Invasive Squamous Cell Carcinoma

Daniel T. Merrick, Dexiang Gao, York E. Miller, Robert L. Keith, Anna E. Baron, William Feser, Timothy C. Kennedy, Patrick J. Blatchford, Sarah Braudrick, Fred R. Hirsch, Lynn Heasley, Paul A. Bunn, Jr., and Wilbur A. Franklin

The Rexinoids LG100268 and LG101506 Inhibit Inflammation and Suppress Lung Carcinogenesis in A/J Mice

Martine Cao, Darlene B. Royce, Renee Risingsong, Charlotte R. Williams, Michael B. Sporn, and Karen T. Liby

LETTER TO THE EDITOR

Acrolein Levels in e-Cigarettes—Letter

CORRECTION

Correction: Durable Antibody Responses Following One Dose of the Bivalent Human Papillomavirus L1 Virus-Like Particle Vaccine in the Costa Rica Vaccine Trial

ABOUT THE COVER

The molecular alterations associated with early pathological steps preceding the development of invasive carcinoma have not been well characterized. A Premalignant Cancer Genome Atlas (PCGA) is needed to both support the collection and molecular profiling (circus plot) of premalignant lesions (purple cells) to identify the sequence of initial driver events that cause normal cells (orange cells) to acquire cancer hallmarks that enable lesions (purple cells) to progress to fully invasive carcinoma, including the critical "additional genomic events" (e.g., checkpoint/tumor suppressor loss or other co-activating event) that transform premalignancy (purple cells in the fourth circle to the right) to cancer (far right). In addition to defining the sequence of site-specific genomic driving events, characterizing the premalignant inflammatory microenvironment, including the contribution of the stroma and immune cell (blue) regulation, will provide a better understanding of the selective forces that drive premalignant lesions to become invasive cancer. This figure appears in the Special Report by Kensler and colleagues (beginning on page 2), which sets out a brief agenda for the immediate future of cancer prevention, involving the inter-related fields of precision medicine and immunoprevention, driven by transformative approaches like PCGA, pivotal elements in a broader domain of personalized public health.