Highlights of This Issue 1

REVIEWS

3  Smoking, p53 Mutation, and Lung Cancer
   Don L. Gibbons, Lauren A. Byers, and Jonathan M. Kurie

14  Nicotine-Mediated Cell Proliferation and Tumor Progression in Smoking-Related Cancers
    Courtney Schaal and Srikumar P. Chellappan

24  Smoking Out Reproductive Hormone Actions in Lung Cancer
    Jill M. Siegfried

32  FBXW7 Mediates Chemotherapeutic Sensitivity and Prognosis in NSCLCs
    Takehiko Yokobori, Yoro Yokoyama, Akira Mogi, Hideki Endoh, Bolag Altan, Takayuki Kosaka, Ei Yamaki, Toshiki Yajima, Kenji Tomizawa, Yoko Azuma, Ryoichi Onozato, Tatsuya Miyazaki, Shigebumi Tanaka, and Hiroyuki Kuwano

CELL CYCLE AND SENESCENCE

38  CXCR4, but not CXCR7, Discriminates Metastatic Behavior in Non–Small Cell Lung Cancer Cells
    Young H. Choi, Marie D. Burdick, Brett A. Strieter, Borna Mehrad, and Robert M. Strieter

48  Autophagy-Dependent Metabolic Reprogramming Sensitizes TSC2-Deficient Cells to the Antimetabolite 6-Aminonicotinamide

CELL DEATH AND SURVIVAL

58  The Impact of miRNA-Based Molecular Diagnostics and Treatment of NRF2-Stabilized Tumors
    Shinuake Yamamoto, Jun Inoue, Tatsuyuki Kawano, Ken-ichi Kozaki, Ken Omura, and Jokji Inazawa

CHROMATIN, GENE, AND RNA REGULATION

82  Loss of the Nucleosome-Binding Protein HMGN1 Affects the Rate of N-Nitrosodimethylamine-Induced Hepatocarcinogenesis in Mice
    Yuri V. Postnikov, Takashi Furusawa, Diana C. Haines, Valentina M. Factor, and Michael Bustin

DNA DAMAGE AND REPAIR

91  Cocarcinogenic Effects of Intrahepatic Bile Acid Accumulation in Cholangiocarcinoma Development
    Elisa Lozano, Laura Sanchez-Vicente, Maria J. Monte, Elisa Herraez, Oscar Biz, Jesus M. Banales, Jose J.G. Marin, and Rocio I.R. Macias

GENOMICS

101  MiR-335 Inhibits Small Cell Lung Cancer Bone Metastases via IGF-IR and RANKL Pathways
    Meng Gong, Junrong Ma, Ryan Guillemette, Mingliang Zhou, Yan Yang, Yujing Yang, Janet M. Hock, and Xijie Yu

111  ROSI and ALK Fusions in Colorectal Cancer, with Evidence of Intratumoral Heterogeneity for Molecular Drivers
    Dana L. Aisner, Teresa T. Nguyen, Diego D. Paskulin, Anh T. Le, Jerry Haney, Nathan Schulte, Fiona Chionh, Jenny Hardingham, John Mariadason, Niall Tebbutt, Robert C. Doebele, Andrew J. Weickhardt, and Marileila Varella-Garcia

ONCOGENES AND TUMOR SUPPRESSORS

119  Mitotic Arrest by Tumor Suppressor RASSF1A Is Regulated via CHK1 Phosphorylation
    Lingyan Jiang, Rong Rong, M. Saeed Sheikh, and Ying Huang
The SmgGDS Splice Variant SmgGDS-558 Is a Key Promoter of Tumor Growth and RhoA Signaling in Breast Cancer
Andrew D. Hauser, Carmen Bergom, Nathan J. Schuld, Xiuxu Chen, Ellen L. Lorimer, Jian Huang, Alexander C. Mackinnon, and Carol L. Williams

Interaction of Delta-like 1 Homolog (Drosophila) with Prohibitins and Its Impact on Tumor Cell Clonogenicity
Arma Begum, Qun Lin, Chenye Yu, Yuri Kim, and Zhong Yun

Signal Transduction

Integrin α3β1 Can Function to Promote Spontaneous Metastasis and Lung Colonization of Invasive Breast Carcinoma
Bo Zhou, Katherine N. Gibson-Corley, Mary E. Herndon, Yihan Sun, Elisabeth Gustafson-Wagner, Melissa Teoh-Fitzgerald, Frederick E. Domann, Michael D. Henry, and Christopher S. Stipp

About the Cover

With regard to incidence and mortality, lung cancer is one of the most common and deadliest cancers worldwide. Interestingly, early epidemiologic and clinical studies suggested an association between tobacco and lung cancer. By the 1950s and 1960s, it was evident that smoking, primarily from cigarettes, is a major contributor to lung cancer, thus prompting the first report of the Surgeon General’s Advisory Committee on Smoking and Health on January 11, 1964. Since that time, a multitude of studies have demonstrated that cigarettes produce more than 60 compounds that have carcinogenic potential. To combat these and other environmental carcinogens, normal cells employ the p53 tumor suppressor, which regulates cell growth and death to prevent cancer. Because p53 is considered a guardian against genomic insult, it is not surprising that it is one of the most frequently mutated genes in many cancers and lung cancer is no exception. In this issue, Gibbons and colleagues mark the 50th anniversary of the Surgeon General’s Report on Smoking and Health by reviewing the evidence of smoking, p53 mutations, and lung cancer. The cover shows an artistic representation of the percentage of hotspot p53 mutations in a human population of lung squamous cell carcinoma and adenocarcinoma. For additional insight and details, please see the article by Gibbons and colleagues on page 3.
Molecular Cancer Research

12 (1)


Updated version
Access the most recent version of this article at:
http://mcr.aacrjournals.org/content/12/1

E-mail alerts
Sign up to receive free email-alerts related to this article or journal.

Reprints and Subscriptions
To order reprints of this article or to subscribe to the journal, contact the AACR Publications Department at pubs@aacr.org.

Permissions
To request permission to re-use all or part of this article, contact the AACR Publications Department at permissions@aacr.org.