Perspectives

775 Altered Histology Provides a Positive Clinical Signal in the Bronchial Epithelium
Eva Szabo
See article by Keith et al., p. 793

779 Cotargeting Cyclin D1 Starts a New Chapter in Lung Cancer Prevention and Therapy
Edward S. Kim, J. Jack Lee, and Ignacio I. Wistuba
See article by Dragnev et al., p. 818

783 Biomarkers in Exploring the Frontiers of Diagnosis, Prognosis, and Therapy of Barrett’s Esophagus
Patrick Yachimski and Richard M. Peek Jr.
See article by Sinicrope et al., p. 829

Commentary

787 Cancer Interception
Elizabeth H. Blackburn

Research Articles

793 Oral Iloprost Improves Endobronchial Dysplasia in Former Smokers
See perspective p. 775

803 Characterizing the Impact of Smoking and Lung Cancer on the Airway Transcriptome Using RNA-Seq
Jennifer Beane, Jessica Vick, Frank Schembri, Christina Anderlind, Adam Gower, Joshua Campbell, Lingqi Luo, Xiao Hui Zhang, Ji Xiao, Yuriy O. Alekseyev, Shenglong Wang, Shawn Levy, Pierre P. Massion, Marc Lenburg, and Avrum Spira

818 Bexarotene Plus Erlotinib Suppress Lung Carcinogenesis Independent of KRAS Mutations in Two Clinical Trials and Transgenic Models
See perspective p. 779

829 Evaluation of Difluoromethylornithine for the Chemoprevention of Barrett’s Esophagus and Mucosal Dysplasia
Frank A. Sinicrope, Russell Broadus, Nina Joshi, Eugene Gerner, Elizabeth Half, Ilan Kirsch, Jan Lewin, Bruce Morlan, and Waun Ki Hong
See perspective p. 783

829 Evaluation of Difluoromethylornithine for the Chemoprevention of Barrett’s Esophagus and Mucosal Dysplasia
Frank A. Sinicrope, Russell Broadus, Nina Joshi, Eugene Gerner, Elizabeth Half, Ilan Kirsch, Jan Lewin, Bruce Morlan, and Waun Ki Hong

840 Hormonal Factors and Risks of Esophageal Squamous Cell Carcinoma and Adenocarcinoma in Postmenopausal Women
Clara Bodelon, Garnet L. Anderson, Mary Anne Rossing, Rowan T. Chlebowski, Heather M. Ochs-Balcom, and Thomas L. Vaughan

851 CYLD Inhibits Tumorigenesis and Metastasis by Blocking JNK/AP1 Signaling at Multiple Levels
Paula Miliani de Marval, Shazia Lutfeali, Jane Y. Jin, Benjamin Leshin, M. Angelica Selim, and Jennifer Y. Zhang

860 Zerumbone Induces Heme Oxygenase-1 Expression in Mouse Skin and Cultured Murine Epidermal Cells through Activation of Nrf2
Jun-Wan Shin, Kohta Ohnishi, Akira Murakami, Jeong-Sang Lee, Joydeb Kumar Kundu, Hye-Kyung Na, Hajime Ohigashi, and Young-Joon Surh

871 Helicobacter pylori Prevalence and Circulating Micronutrient Levels in a Low-Income United States Population
Meira Epplein, Lisa B. Signorello, Wei Zheng, Quyin Cai, Margaret K. Hargreaves, Angelika Michiel, Michael Pawlita, Jay H. Fowke, Pelayo Correa, and William J. Blot
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>879</td>
<td>Targeting p53-Null Neuroblastomas through RLIP76</td>
<td>Jyotsana Singhal, Sushma Yadav, Lokesh Dalasanur Nagaprashantha, Rit Vatsyayan, Sharad S. Singhal, and Sanjay Awasthi</td>
</tr>
<tr>
<td>890</td>
<td>Results from a Dose–Response Study Using 3,3'-Diindolylmethane in the K14-HPV16 Transgenic Mouse Model: Cervical Histology</td>
<td>Daniel W. Sepkovic, Johann Stein, Antoine D. Carlisle, H. Barbara Ksieski, Karen Auborn, Laura Raucci, Themba Nyirenda, and H. Leon Bradlow</td>
</tr>
<tr>
<td>897</td>
<td>Garlic Constituent Diallyl Trisulfide Suppresses X-linked Inhibitor of Apoptosis Protein in Prostate Cancer Cells in Culture and In Vivo</td>
<td>Su-Hyeong Kim, Ajay Bommareddy, and Shivendra V. Singh</td>
</tr>
<tr>
<td>907</td>
<td>Chemoprevention of Intestinal Polyps in Apc Min/+ Mice Fed with Western or Balanced Diets by Drinking Annucca Apple Polyphenol Extract</td>
<td>Lucia Fini, Giulia Piazz, Yahya Daoud, Michael Selgrad, Shinji Maegawa, Melissa Garcia, Vincenzo Fogliano, Marco Romano, Giulia Graziani, Paola Vitaglione, Susanne W. Carmack, Antonio Gasbarrini, Robert M. Genta, Jean-Pierre Issa, C. Richard Boland, and Luigi Ricciardiello</td>
</tr>
</tbody>
</table>

### ABOUT THE COVER

The cover features an image of RNA sequencing (RNA-Seq) results for a processed transcript of the mucin 5AC gene (MUC5AC, foreground), a potentially important smoking- and lung cancer-related gene. The output is superimposed on an image of human ciliated columnar bronchial epithelial cells obtained by endoscopic brushings of the mainstem bronchi (100X, modified Wright-Giemsa stain). The MUC5AC read coverage plot displays reads aligning to the transcript normalized by the total number of reads on the y-axis versus the genomic coordinates on the x-axis. The MUC5AC processed transcript shows marked upregulation in healthy current smokers compared with never smokers and downregulation in smokers with lung cancer compared with smokers having benign lung disease. The detection of MUC5AC expression highlights the advantage of RNA-Seq because the transcript is not annotated in RefSeq and there are no probes on the Affymetrix Exon 1.0 ST microarray to interrogate it. RNA-Seq is one of several cutting-edge next-generation sequencing platforms producing tremendous advances in the biology of cancer and premalignancy that promise to lead to new, effective approaches for cancer therapy and prevention. See articles by Beane et al. (beginning on page 803) and Blackburn (beginning on page 787) for more information.