PERSPECTIVES

1523 Molecular Imaging of Inflammation and Carcinogenesis
David A. Ostrov and Christopher H. Contag
Perspective on Uddin et al., p. 1536

1527 Alu in Lynch Syndrome: A Danger SINE?
Megan P. Hitchins and John Burn
Perspective on Pérez-Cabornero et al., p. 1546, and 1556

1531 Examining Stools for Colon Cancer Prevention: What Are We Really Looking for?
Tim Byers
Perspective on Cai et al., p. 1572, and Khalid-de Bakker, p. 1563

1534 Boxing Bladder Cancer with COX-2–specific Inhibition
John D. Kelly and Emma Hall
Perspective on Sabichi et al., p. 1580

RESEARCH ARTICLES

1536 Fluorinated COX-2 Inhibitors as Agents in PET Imaging of Inflammation and Cancer
Md. Jashim Uddin, Brenda C. Crews, Kebreab Ghebreselasie, Imran Huda, Philip J. Kingsley, Mohammad Sib Ansari, Mohammed N. Tantawy, Jeffery Reese, and Lawrence J. Marnett
See perspective on p. 1523

1546 Characterization of New Founder Alu-Mediated Rearrangements in MSH2 Gene Associated with a Lynch Syndrome Phenotype
Lucia Pérez-Cabornero, Ester Borrás Flores, Mar Infante Sanz, Eladio Velasco Sampedro, Alberto Acedo Becares, Enrique Lastra Aras, Jorge Cuevas González, Marta Pineda Riu, Teresa Ramón y Cajal Asensio, Gabriel Capellá Munar, Cristina Miner Pino, and Mercedes Durán Domínguez
See perspective on p. 1527

1556 Frequency of Rearrangements in Lynch Syndrome Cases Associated with MSH2: Characterization of a New Deletion Involving both EPCAM and the 5’ Part of MSH2
Lucia Pérez-Cabornero, Mar Infante Sanz, Eladio Velasco Sampedro, Enrique Lastra Aras, Alberto Acedo Becares, Cristina Miner Pino, and Mercedes Durán Domínguez
See perspective on p. 1527

1563 Test Performance of Immunologic Fecal Occult Blood Testing and Sigmoidoscopy Compared with Primary Colonoscopy Screening for Colorectal Advanced Adenomas
Carolina A.J. Khalid-de Bakker, Daisy M.A.E. Jonkers, Silvia Sanduleanu, Adriaan P. de Bruijne, Gerrit A. Meijer, Jan B.M.J. Janssen, Manon van Engeland, Reinhold W. Stockbrügger, and Ad A.M. Mascele
See perspective on p. 1531

1572 Performance of a Colorectal Cancer Screening Protocol in an Economically and Medically Underserved Population
Shan-Rong Cai, Su-Zhan Zhang, Hong-Hong Zhu, Yan-Qin Huang, Qi-Rong Li, Xin-Yuan Ma, Kai-Yan Yao, and Shu Zheng
See perspective on p. 1531

1580 A Randomized Controlled Trial of Celecoxib to Prevent Recurrence of Nonmuscle-Invasive Bladder Cancer
See perspective on p. 1534

1590 Effect of Low-Fat Diets on Plasma Levels of NF-κB–Regulated Inflammatory Cytokines and Angiogenic Factors in Men with Prostate Cancer
See perspective on p. 1527
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1599</td>
<td>A Gene Expression Signature from Peripheral Whole Blood for Stage I Lung Adenocarcinoma</td>
</tr>
<tr>
<td>1609</td>
<td>Copy Number Imbalances between Screen- and Symptom-Detected Breast Cancers and Impact on Disease-Free Survival</td>
</tr>
<tr>
<td>1617</td>
<td>Dietary Vitamin D and Vitamin D Receptor Level Modulate Epithelial Cell Proliferation and Apoptosis in the Prostate</td>
</tr>
<tr>
<td>1626</td>
<td>Postmenopausal Serum Sex Steroids and Risk of Hormone Receptor–Positive and -Negative Breast Cancer: a Nested Case–Control Study</td>
</tr>
<tr>
<td>1636</td>
<td>Red Wine Consumption is Inversely Associated with 2-Amino-1-Methyl-6-Phenylimidazo[4,5-b]Pyridine–DNA Adduct Levels in Prostate</td>
</tr>
<tr>
<td>1645</td>
<td>Effects of Supplemental Vitamin D and Calcium on Biomarkers of Inflammation in Colorectal Adenoma Patients: A Randomized, Controlled Clinical Trial</td>
</tr>
<tr>
<td>1655</td>
<td>Oral Azathioprine Leads to Higher Incorporation of 6-Thioguanine in DNA of Skin than Liver: The Protective Role of the Keap1/Nrf2/ARE Pathway</td>
</tr>
<tr>
<td>1665</td>
<td>Mammary Gland Density Predicts the Cancer Inhibitory Activity of the N-3 to N-6 Ratio of Dietary Fat</td>
</tr>
<tr>
<td>1675</td>
<td>Association of Meat Intake and Meat-Derived Mutagen Exposure with the Risk of Colorectal Polyps by Histologic Type</td>
</tr>
<tr>
<td>1686</td>
<td>Curcumin Modulates MicroRNA-203–Mediated Regulation of the Src-Akt Axis in Bladder Cancer</td>
</tr>
<tr>
<td>1710</td>
<td>Body Fatness during Childhood and Adolescence, Adult Height, and Risk of Colorectal Adenoma in Women</td>
</tr>
</tbody>
</table>
ABOUT THE COVER

The cover features a photograph of a sagittal section from a whole-body microPET (positron emission tomography)/CT (computed tomography) image of a female nude mouse bearing a 1483 human head and neck squamous cell carcinoma (HNSCC) on the left flank. These tumors express high levels of cyclooxygenase-2 (COX-2). A COX-2–targeted $^{18}$F-labeled tracer was injected (100 $\mu$L, 350 $\mu$Ci, retro-orbital injection) prior to PET imaging. The red crosshairs mark the location of the 1483 COX-2–expressing tumor. A false-color scale shows black as the lowest signal and red as the highest. The image shows robust uptake into the tumor compared with surrounding normal tissues at three hours post-injection of the PET tracer. In contrast, tumors that do not express COX-2 show minimal radiotracer uptake. See articles by Uddin et al. (beginning on page 1536) and Ostrov and Contag (beginning on page 1523) for more information.