COMMENTARY

Trials and Tribulations of Interrogating Biomarkers to Define Efficacy of Cancer Risk Reductive Interventions
Dean E. Brenner and Ernest Hawk
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RESEARCH ARTICLES

A Randomized, Placebo-Controlled, Preoperative Trial of Allopurinol in Subjects with Colorectal Adenoma
Matteo Puntoni, Daniela Branchi, Alessandra Argusti, Silvia Zanardi, Cristiano Crosta, Emanuele Meroni, Francesco Munizzi, Paolo Michetti, Gianni Coccia, Giuseppe De Roberto, Roberto Bandelloni, Laura Turbino, Egle Minetti, Marco Mori, Sandra Salvi, Simona Boccardo, Beatrice Gatteschi, Roberto Benelli, Angelica Sonzogni, and Andrea DeCensi
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Determination of Molecular Markers for BRCA1 and BRCA2 Heterozygosity Using Gene Expression Profiling
Asher Y. Salmon, Mali Salmon-Divon, Tamar Zahavi, Yulia Barash, Rachel S. Levy-Drummer, Jasmine Jacob-Hirsch, and Tamar Peretz

Insulin-Like Growth Factors and Insulin-Like Growth Factor–Binding Proteins and Prostate Cancer Risk: Results from the Prostate Cancer Prevention Trial

Endobronchial miRNAs as Biomarkers in Lung Cancer Chemoprevention

Effect of Exercise on Markers of Inflammation in Breast Cancer Survivors: The Yale Exercise and Survivorship Study
Sara B. Jones, Gwendolyn A. Thomas, Sara D. Hesselsweet, Marty Alvarez-Reeves, Herbert Yu, and Melinda L. Irwin

Prolonged Biologically Active Colonic Tissue Levels of Curcumin Achieved After Oral Administration—A Clinical Pilot Study Including Assessment of Patient Acceptability

Dietary Immunosuppressants Do Not Enhance UV-Induced Skin Carcinogenesis, and Reveal Discordance between p53-Mutant Early Clones and Carcinomas

Gamma-aminobutyric Acid (GABA) Prevents the Induction of Nicotinic Receptor–Regulated Signaling by Chronic Ethanol in Pancreatic Cancer Cells and Normal Duct Epithelia
Mohammed H. Al-Wadei, Hussein A.N. Al-Wadei, and Hildegard M. Schuller

Roles of Keap1–Nrf2 System in Upper Aerodigestive Tract Carcinogenesis
Akira Ohkoshi, Takafumi Suzuki, Masao Ono, Toshihito Kobayashi, and Masayuki Yamamoto
Immunosuppressive drugs are thought to cause the dramatically increased risk of carcinomas in sun-exposed skin of organ transplant recipients. However, the drugs differ in local effects on the skin and may thus be predictive of skin cancer risk and potentially provide guidance in minimizing the risk. In this study, the tumorigenic properties of commonly used immunosuppressants (e.g., azathioprine, ciclosporine, and rapamycin) were compared in experiments using human skin and mouse models. The cover shows a representative H&E-stained image of human skin equivalents (HSE) supplemented with rapamycin (100 nM) for a 2-week duration. Rapamycin reduced the epidermis that developed in the HSE: 3 to 4 epidermal cell layers were formed instead of 7 to 8 in the Control HSE supplemented with dimethyl sulfoxide (DMSO) (not shown). Rapamycin also decreased the proliferation index and expression of hyperproliferative markers K16 and K17 (not shown). These experiments established whether local effects of immunosuppressants on UV-induced apoptosis and p53 mutations in the skin are predictive of skin cancer risk. See article by Voskamp and colleagues (beginning on page 129) for more information.