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<td>Highlights from Recent Cancer Literature</td>
<td>Ethan B. Butler, Yuhua Zhao, Cristina Muñoz-Pinedo, Jianrong Lu, and Ming Tan</td>
<td>This important study provides the first glimpse of a paradigm shift in preclinical mouse models that can more reliably predict the clinical efficacy of new drugs based on evaluation of new drugs in mice with macroscopic metastases seeded by a primary tumor that had been surgically resected.</td>
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<td>The Emerging &quot;Hallmarks&quot; of Metabolic Reprogramming and Immune Evasion: Distinct or Linked?</td>
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<td>Eric Guerin, Shan Man, Ping Xu, and Robert S. Kerbel</td>
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<td>Fibroblast-Specific Protein 1/S100A4–Positive Cells Prevent Carcinoma through Collagen Production and Encapsulation of Carcinogens</td>
<td>Jinhua Zhang, Lin Chen, Xiaoman Liu, Thomas Kammerdorferens, Thomas Blankenstein, and Zhihai Qin</td>
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<td>CSF1R Signaling Blockade Stanches Tumor-Infiltrating Myeloid Cells and Improves the Efficacy of Radiotherapy in Prostate Cancer</td>
<td>Jingying Xu, Jemima Escamilla, Stephen Mok, John David, Saul Priceman, Brian West, Gideon Bollag, William McBride, and Lily Wu</td>
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MOLECULAR AND CELLULAR PATHOBIOLOGY

CHD1 Is a 5q21 Tumor Suppressor Required for ERG Rearrangement in Prostate Cancer
Lia Burkhardt, Sarah Fuchs, Antje Krohn, Sawinee Masser, Malte Mader, Martina Kluth, Frederik Bachmann, Hartwig Huland, Thomas Steuber, Markus Graefen, Thorsten Schlonn, Sarah Minner, Guido Sauter, Huseyin Sirma, and Ronald Simon

Precis: Seminal findings identify a key epigenetic driver in advanced prostate cancers that by recruiting mutated forms of the androgen receptor drives ERG fusion-independent forms in this deadly disease.

Deficiency of Phospholipase A2 Group 7 Decreases Intestinal Polyposis and Colon Tumorigenesis in ApcMin/+ Mice
Changxin Xu, Ethan C. Reichert, Tomoyuki Nakano, Mariah Lohse, Alison A. Gardner, Mónica P. Revelo, Matthew K. Topham, and Diana M. Stafforini

Precis: Deficiency in a phospholipase A2 that participates in inflammatory responses inhibits colon tumorigenesis and may be a novel target for reprogramming inflammation as a strategy for therapeutic intervention.

The Major Reverse Transcriptase–Incompetent Splice Variant of the Human Telomerase Protein Inhibits Telomerase Activity but Protects from Apoptosis
Imke Listerman, Jie Sun, Francesca S. Gazzaniga, Jason L. Lukas, and Elizabeth H. Blackburn

Precis: Results reveal that a major hTERT splice variant can confer a growth advantage to cancer cells independent of telomere maintenance, suggesting hTERT makes multiple contributions to cancer pathophysiology.

Dynamics of Senescent Cell Formation and Retention Revealed by p14ARF Induction in the Epidermis
Ronit Tokarsky-Amiel, Narmen Azazmeh, Aharon Helman, Yan Stein, Alia Hassan, Alexander Maly, and Ittai Ben-Porath

Precis: Studies in a novel mouse model deepen insights into the dynamics of cellular senescence, a central mechanism of tumor suppression.

TNRC9 Downregulates BRCA1 Expression and Promotes Breast Cancer Aggressiveness

Precis: This potentially seminal study unveils a new paradigm in regulation of BRCA1 that may advance evidence that its epigenetic regulation contributes widely to the development of sporadic breast cancers where BRCA genes are unmethylated.

An Essential Requirement for the SCAP/SREBP Signaling Axis to Protect Cancer Cells from Lipotoxicity

Precis: Findings suggest that the differential between a tumor’s ability to synthesize and desaturate fatty acids might stratify cancer patient populations that could respond strongly to inhibitors of fatty acid metabolism.

PREVENTION AND EPIDEMIOLOGY

Genomic Aberrations Occurring in Subsets of Serrated Colorectal Lesions but not Conventional Adenomas

Precis: Findings suggest that a newly characterized type of colorectal polyp, termed a sessile-serrated polyp, may be an important precursor for a significant number of colorectal cancers.

Genomic Aberrations Occurring in Subsets of Serrated Colorectal Lesions but not Conventional Adenomas

Precis: Findings suggest that a newly characterized type of colorectal polyp, termed a sessile-serrated polyp, may be an important precursor for a significant number of colorectal cancers.
THERAPEUTICS, TARGETS, AND CHEMICAL BIOLOGY

2873

High-Throughput Tyrosine Kinase Activity Profiling Identifies FAK as a Candidate Therapeutic Target in Ewing Sarcoma
Brian D. Crompton, Anne L. Carlton, Aaron R. Thorner, Amanda L. Christie, Jinyan Du, Monica L. Calicchio, Miguel N. Rivera, Mark D. Fleming, Nancy E. Kohl, Andrew L. Kung, and Kimberly Stegmaier

Precise: By leveraging a kinase profiling approach to identify new targets, this study identified and validated a druggable target in a well-studied disease where clinical management remains problematic.

2884

Prooncogenic Factors miR-23b and miR-27b Are Regulated by Her2/Neu, EGF, and TNF-α in Breast Cancer
Lianjin Jin, Oliver Wessely, Eric G. Marcusson, Cristina Iva, George A. Calin, and Suresh K. Alahari

Precise: Her2/Neu oncogene is highly expressed in 30% of breast cancers, and this study reveals how Her2 regulates the tumor suppressor Nischarin in breast cancer via miRNA expression.

2897

Hepatocarcinogenesis Driven by GSNOR Deficiency Is Prevented by iNOS Inhibition
Chi-Hui Tang, Wei Wei, Martha A. Hanes, and Limin Liu

Precise: This important study offers preclinical proof that iNOS inhibitors can be used to attack liver cancers driven by uncontrolled nitrosative stress, possibly offering an effective therapeutic approach for some liver cancer patients.

TUMOR AND STEM CELL BIOLOGY

2905

ATIP3, a Novel Prognostic Marker of Breast Cancer Patient Survival, Limits Cancer Cell Migration and Slows Metastatic Progression by Regulating Microtubule Dynamics

Precise: As a clinically validated target for cancer drug development, microtubules offer a focus to expand the armentarium of possible approaches to attack malignant disease.

2916

Activation of HIF2α in Kidney Proximal Tubule Cells Causes Abnormal Glycogen Deposition but not Tumorogenesis
Leiping Fu, Gang Wang, Maria M. Shevchuk, David M. Nanus, and Lorraine J. Gudas

Precise: One of two factors thought to be causative in driving formation of clear cell renal cancers does not appear to be relevant when examined in a tissue-relevant mouse model, challenging an existing orthodoxy.

LETTER TO THE EDITOR

2926

Interactions of Abiraterone, Eplerenone, and Prednisolone with Wild-Type and Mutant Androgen Receptor: A Rationale for Increasing Abiraterone Exposure or Combining with MDV3100—Letter
David End, Arturo Molina, Mary Todd, and Michael L. Meyers
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