REVIEWS

1925 Advanced Glycation End-Products: A Biological Consequence of Lifestyle Contributing to Cancer Disparity
David P. Turner

1930 Genome Medicine in Cancer: What's in a Name?
Anne F. Schott, Charles M. Perou, and Daniel F. Hayes

PRIORITY REPORTS

1936 Manic Fringe Promotes a Claudin-Low Breast Cancer Phenotype through Notch-Mediated PIK3CG Induction
Shubing Zhang, Wen-Cheng Chung, Guanming Wu, Sean E. Egan, Lucio Miele, and Keli Xu
Précis: These results define a glycosylpeptide transferase as an oncogene in an aggressive subtype of breast cancer, with mechanistic insights offering a preclinical justification to block PI3K-γ as a treatment strategy in this setting.

1944 PLZF, a Tumor Suppressor Genetically Lost in Metastatic Castration-Resistant Prostate Cancer, Is a Mediator of Resistance to Androgen Deprivation Therapy
Chen-Lin Hsieh, Ginevra Botta, Shuai Gao, Tiantian Li, Eliezer M. Van Allen, Daniel J. Treacy, Changmeng Cai, Housheng Hansen He, Christopher I. Sweeney, Myles Brown, Steven P. Balk, Peter S. Nelson, Levi A. Garraway, and Philip W. Kantoff
Précis: This study interrogates an androgen responsive tumor suppressor gene whose loss of expression is associated with a new molecular subset of prostate cancer that participates in resistance to androgen deprivation therapy.

INTEGRATED SYSTEMS AND TECHNOLOGIES

1949 A Chemical Genetics Approach for the Functional Assessment of Novel Cancer Genes
Qianhe Zhou, Adnan Derti, David Ruddy, Daniel Rakiec, Iris Kao, Philippe Guillaume, Petra Baumgaertner, Daniel E. Speiser, Immanuel Luescher, and Nathalie Rufer
Précis: The Degron-KI method represents a new approach to study the function of cancer genes that is able to better mimic the effects of small molecule inhibitors than current genetic approaches.

Molecular and Cellular Pathobiology

1992 The Endogenous Cell-Fate Factor Dachshund Restrains Prostate Epithelial Cell Migration via Repression of Cytokine Secretion via a CXCL Signaling Module
Ke Chen, Kongming Wu, Xuanmao Jiao, Liping Wang, Xiaoming Ju, Min Wang, Gabriela Di Sanle, ShaoXia Xue, Qiong Wang, Kevin Li, Xin Sun, Congwen Xu, Zhiping Li, Mathew C. Castano, Adam Ertel, Sankar Addya, Peter A. McGuire, Michael P. Lisanti, Chengguang Wang, Richard J. Davis, Graeme Mardon, and Richard G. Pestell
Précis: These findings show how a cell fate determination factor that functions in normal development acts to inhibit the growth of androgen therapy-resistant prostate cancer.
Decoy Receptor DcR1 Is Induced in a p50/CDK2 Inhibition Causes Anaphase Catastrophe in Lung Cancer through the Centrosomal Protein CP110


Précis: This study describes how CDK2 inhibitors preferentially target KRAS mutant lung cancer cells that are genetically unstable, a disease type relatively resistant to other chemotherapeutic strategies.

Decoy Receptor DcR1 Is Induced in a p50/ Bcl3–Dependent Manner and Attenuates the Efficacy of Temozolomide

Nassir M. Mansour, Giovanna M. Bernal, Longtuo Wu, Clayton D. Crawley, Kirk E. Cahill, David J. Voce, Irina V. Balysvnikova, Wei Zhang, Ruben Spretz, Luis Nunez, Gustavo F. Larsen, Ralph R. Weichselbaum, and Bakhtiar Yamini

Précis: Upregulation of a Fas/TNF/TRA1–related decoy receptor by a cytotoxic drug used widely to treat deadly brain tumors was found to limit drug efficacy, providing a rationale to target this receptor as a drug sensitization strategy.
Tenascin-C Protects Cancer Stem–like Cells from Immune Surveillance by Arresting T-cell Activation

Elena Jachetti, Sara Caputo, Stefania Mazzoleni, Chiara Svetlana Brambilla, Sara Martina Parigi, Matteo Grioni, Ignazio Stefano Piras, Umberto Restucia, Arianna Calcinotto, Massimo Freschi, Angela Bachi, Rossella Galli, and Matteo Bellone

Précis: These results shed light on how early-disseminating cancer stem-like cells seed quiescent future sites of metastasis in tumor-draining lymph nodes by engaging a protumorigenic extracellular matrix protein that mediates local immune escape.

Development of Resistance to EGFR-Targeted Therapy in Malignant Glioma Can Occur through EGFR-Dependent and -Independent Mechanisms

Stefan Klingler, Baofeng Guo, Jun Yao, Haiyan Yan, Ling Zhang, Angelina V. Vaseva, Sida Chen, Peter Canoll, James W. Horner, Y. Alan Wang, Ji-Hye Paik, Haoqiang Ying, and Hongwu Zheng

Précis: These findings provide mechanistic insight into EGFR drug resistance in glioma and offer a platform to test therapies targeting aberrant EGFR signaling in this setting.

Chronic Inflammation Induces a Novel Epigenetic Program That Is Conserved in Intestinal Adenomas and in Colorectal Cancer

Monther Abu-Remaileh, Sebastian Bender, Günter Raddatz, Ihab Ansari, Daphne Cohen, Julian Gutekunst, Tanja Musch, Heinz Linhart, Achim Beiling, Eli Pikarsky, Yehudit Bergman, and Frank Lyko

Précis: These findings showing how an altered epigenetic program links inflammation to colon cancer strongly reinforce the concept that the microenvironment dictates the development and maintenance of malignant characters.

ABOUT THE COVER

Pelvic lymph nodes are the most frequent sites of prostate cancer dissemination, as depicted here by pan-cytokeratin immunohistochemistry on a human specimen. However, there is little knowledge about how precociously disseminated cancer cells seed lymph nodes and protect themselves from immune surveillance. Jachetti and colleagues report that early-disseminating cancer stem-like cells seed quiescent future sites of metastasis in tumor-draining lymph nodes by engaging Tenascin-C, a protumorigenic extracellular matrix protein, which mediates local immune escape by arresting T lymphocyte activation. For details, see article by Jachetti and colleagues on page 2095.