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187 Myeloid Cell–Derived Oxidized Lipids and Regulation of the Tumor Microenvironment
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CANCER RESEARCH LANDMARKS

195 Hypoxia-Inducible Factors in Cancer
Laura C. Kim and M. Celeste Simon
See related article by Zhong and colleagues, Cancer Res 1999;59:5830–5

CANCER RESEARCH HIGHLIGHTS

197 Chemotherapy Triggers T Cells to Remodel the Extracellular Matrix and Promote Metastasis
Mikhail G. Kolonin and Wendy A. Woodward
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GENOME AND EPIGENOME

199 Clonal Hematopoiesis Mutations in Patients with Lung Cancer Are Associated with Lung Cancer Risk Factors
Wei Hong, Ang Li, Yanhong Liu, Xiangjun Xiao, David C. Christiani, RayJean J. Hung, James McKay, John Field, Christopher I. Amos, and Chao Cheng
Analysis of whole-exome sequencing data uncovers correlations between clonal hematopoiesis and lung cancer risk factors, identifies genetic variants correlated with clonal hematopoiesis, and highlights hundreds of potential novel clonal hematopoiesis mutations.

210 KMT9 Controls Stemness and Growth of Colorectal Cancer
Christopher Berlin, Félicie Cottard, Dominica Willmann, Sylvia Urban, Stephan M. Tirier, Lisa Marx, Karsten Rippe, Mark Schmitt, Valentina Petrocelli, Florian R. Greten, Stefan Fichtner-Feigl, Rebecca Kesselring, Eric Metzger, and Roland Schüle
The H4K12 methyltransferase KMT9 regulates tumor cell proliferation and stemness in colorectal cancer, indicating that targeting KMT9 could be a useful approach for preventing and treating this disease.

MOLECULAR CELL BIOLOGY

221 Novel Oncogenic Transcription Factor Cooperation in RB-Deficient Cancer
This study identifies that RB loss in prostate cancer drives cooperation between AR and E2F1 as coregulators of transcription, which is linked to the progression of advanced disease.

235 Human Endogenous Retrovirus Type K Promotes Proliferation and Confers Sensitivity to Antiretroviral Drugs in Merlin-Negative Schwannoma and Meningioma
Emmanuel A. Maze, Bora Agit, Shona Reeves, David A. Hilton, David B. Parkinson, Liyam Laraba, Emanuela Ercolano, Kathreena M. Kurian, C. Oliver Hanemann, Robert D. Behshaw, and Sylvia Ammoun
The endogenous retrovirus HERV-K activates oncogenic signaling pathways and promotes proliferation of Merlin-deficient schwannomas and meningiomas, which can be targeted with antiretroviral drugs and TEAD inhibitors.
**TUMOR BIOLOGY AND IMMUNOLOGY**

248 Plasticity in the Absence of NOTCH Uncovers a RUNX2-Dependent Pathway in Small Cell Lung Cancer
Deli Hong, Erik H. Knelson, Yixiang Li, Yavuz T. Durmaz, Wenhua Gao, Emily Walton, Amir Vajdi, Tran Thai, Maura Sticco-Ivins, Amin H. Sabet, Kristen L. Jones, Anna C. Schinzel, David A. Barbie, and Matthew G. Oser

A genetically engineered mouse model of NOTCH-mutant SCLC reveals that nonneuroendocrine plasticity persists in the absence of NOTCH, driven by a RUNX2-REST-dependent pathway and innate immune signaling.

264 BAFF Attenuates Immunosuppressive Monocytes in the Melanoma Tumor Microenvironment
Wei Liu, Paweł Stachura, Haifeng C. Xu, Renata Váraljai, Prashant Shinde, Nikkitha Umesh Ganesh, Matthias Mack, Anke Van Lierop, Anfèi Huang, Balumurugan Sundaram, Karl S. Lang, Daniel Picard, Ute Fischer, Marc Remke, Bernhard Homey, Alexander Roesch, Dieter Huaussinger, Philipp A. Lang, Arndt Borkhardt, and Aleksandra A. Pandyra

The BAFF cytokine regulates monocytes in the melanoma microenvironment to suppress tumor growth, highlighting the importance of BAFF in antitumor immunity.

**TRANSLATIONAL SCIENCE**

278 T Cells Promote Metastasis by Regulating Extracellular Matrix Remodeling following Chemotherapy

Chemotherapy induces prometastatic pulmonary ECM remodeling by upregulating LOX in T cells, which can be targeted with LOX inhibitors to suppress metastasis.

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292 Inhibition of FGFR Reactivates IFNγ Signaling in Tumor Cells to Enhance the Combined Antitumor Activity of Lenvatinib with Anti-PD-1 Antibodies
Yusuke Adachi, Hiroshi Kамиyama, Kenji Ichiwaka, Sayo Fukushima, Yoichi Ozawa, Shogo Yamaguchi, Satoshi Goda, Takayuki Kimura, Kotaro Kodama, Masahiro Matsuki, Saori Watanabe Miyano, Akira Yokoi, Yu Kato, and Yasuhiro Funahashi

FGFR pathway activation inhibits IFNγ signaling in tumor cells, and FGFR inhibition with lenvatinib enhances antitumor immunity and the activity of anti-PD-1 antibodies.

307 Repurposing Ceritinib Induces DNA Damage and Enhances PARP Inhibitor Responses in High-Grade Serous Ovarian Carcinoma

The kinase inhibitor ceritinib synergizes with PARPi to induce tumor regression in ovarian cancer models, suggesting that ceritinib combined with PARPi may be an effective strategy for treating ovarian cancer.

**CONVERGENCE AND TECHNOLOGIES**

320 Network Analysis Identifies Regulators of Basal-Like Breast Cancer Reprogramming and Endocrine Therapy Vulnerability
Sea R. Choi, Chae Young Hwang, Jonghoon Lee, and Kwang-Hyun Cho

A network model enables investigation of mechanisms regulating the basal-to-luminal transition in breast cancer, identifying BCL11A and HDAC2 as optimal targets that can induce basal-like breast cancer reprogramming and endocrine therapy sensitivity.

334 Prostate Cancer Risk Stratification via Nondestructive 3D Pathology with Deep Learning-Assisted Gland Analysis
Weisi Xie, Nicholas P. Reder, Can Koyuncu, Patrick Leo, Sarah Hawley, Hongyi Huang, Chenyi Mao, Nadia Postupna, Soyoung Kang, Robert Serafin, Gan Gao, Qinghua Han, Kevin W. Bishop, Lindsey A. Barner, Pingfu Fu, Jonathan L. Wright, C. Dirk Keene, Joshua C. Vaughan, Andrew Janowczyk, Adam K. Glaser, Anant Madabhushi, Lawrence D. True, and Jonathan T.C. Liu

An end-to-end pipeline for deep learning-assisted computational 3D histology analysis of whole prostate biopsies shows that nondestructive 3D pathology has the potential to enable superior prognostic stratification of patients with prostate cancer.
Anticancer treatments are capable of inducing host-mediated protumorigenic and prometastatic effects. Paclitaxel chemotherapy induces extracellular matrix (ECM) remodeling and mechanostructural changes in the lungs, ultimately facilitating cancer cell seeding and metastasis. Lysyl oxidase highly expressed by cytotoxic T cells following paclitaxel therapy contributes to ECM remodeling. Shown are the metastatic lesions in the lungs of paclitaxel-treated mice stained with hematoxylin and eosin. For details, see the article by Haj-Shomaly and colleagues on page 278.

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