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**Précis:** Findings provide new insight into the role of the IGF-1R in cancer, and may have implications for clinical use of IGF-1R inhibitors in cancer treatment.

**Précis:** High resolution non-invasive methods for visualizing regions of tumor hypoxia could ease preclinical development of new principles to attack these regions, which are typically highly resistant to therapy.

**Précis:** This paper describes two novel molecules that connect cell cycle regulation which are perturbed in glioblastoma.

**Précis:** Study describes a rapid, efficient, quantitative and versatile strategy with great promise for cancer detection by blood test, applicable to gauging therapeutic response and relapse of tumors.

**Précis:** Expression profiles identify deviant clinical samples that would otherwise adversely affect biomarker discovery.
The Histone Demethylase JMJD2B Is Regulated by Estrogen Receptor α and Hypoxia, and Is a Key Mediator of Estrogen Induced Growth
Jun Yang, Adrian M. Jubb, Luke Pike, Francesca M. Buffa, Helen Turley, Dilair Baban, Russell Leek, Kevin C. Gatter, Jiannis Ragoussis, and Adrian L. Harris

Precis: Findings provide a biological rationale to therapeutically target histone demethylases for breast cancer treatment.

Immunologic Consequences of Signal Transducers and Activators of Transcription 3 Activation in Human Squamous Cell Carcinoma
Emilia Albesiano, Meghan Davis, Alfred P. See, James E. Han, Michael Lim, Drew M. Pardoll, and Young Kim

Precis: Findings highlight the nodal role of STAT3 in activating immune evasion mechanisms erected by tumors, reinforcing interest in STAT3 targeting for cancer therapy.

Steroid Receptor Coactivator-3 Expression in Lung Cancer and Its Role in the Regulation of Cancer Cell Survival and Proliferation
Di Cai, David S. Shames, Maria Gabriela Raso, Yang Xie, Young H. Kim, Jonathan R. Pollack, Luc Girard, James P. Sullivan, Bening Gao, Michael Peyton, Meera Nanjundan, Lauren Byers, John Heymach, Gordon Mills, Adi F. Gazdar, and John D. Minna

Precis: A histone acetyltransferase and nuclear hormone receptor is implicated in lung cancer maintenance and resistance to EGFR inhibitors.

Interaction of TAp73 and Breast Cancer–Associated Gene 3 Enhances the Sensitivity of Cervical Cancer Cells in Response to Irradiation-Induced Apoptosis
Thomas Ho-Yin Leung and Hextan Yuen-Sheung Ngan

Precis: Findings define a mechanism through which transcriptionally active isoforms of the p53 homolog p73 promote cancer radiosensitivity.

Genome-Wide Identification of PAX3-FKHR Binding Sites in Rhabdomyosarcoma Reveals Candidate Target Genes Important for Development and Cancer
Liang Cao, Yunkai Yu, Sven Bilke, Robert L. Walker, Linxia H. Mayeenemy, David O. Azorsa, Fan Yang, Marinbin Pineda, Lee J. Helman, and Paul S. Meltzer

Precis: Findings offer a framework to systematically evaluate targeted approaches to treatment of a common pediatric cancer.

A KRAS Variant in Ovarian Cancer Acts as a Genetic Marker of Cancer Risk

Precis: A genetic variation in the KRAS oncogene that disrupts a regulatory microRNA binding site increases the risk of developing ovarian cancer.

KRAB Zinc Finger Protein ZNF382 Is a Proapoptotic Tumor Suppressor That Represses Multiple Oncogenes and Is Commonly Silenced in Multiple Carcinomas
Yingduan Cheng, Hua Geng, Suk Hang Cheng, Pei Liang, Yan Bai, Jisheng Li, Gopesh Srivastava, Margaret H.L. Ng, Tatsuwo Fukagawa, Xiushan Wu, Anthony T.C. Chan, and Qian Tao

Precis: Cancer epigenetic studies of a little studied zinc-finger protein reveal it to be a tumor suppressor that is widely attenuated in cancer.

Occupational Trichloroethylene Exposure and Renal Carcinoma Risk: Evidence of Genetic Susceptibility by Reductive Metabolism Gene Variants
Lee E. Moore, Paolo Boffetta, Sara Karami, Paul Brennan, Patricia S. Stewart, Rayjean Hung, David Zaridze, Vsevolod Matveev, Vladimir Janout, Helena Kollarova, Vladimir Bencko, Marie Navratilova, Neoinila Szceszenia-Dabrowska, Dana Mates, Jan Gromiec, Ivana Holcatova, Maria Merino, Stephen Chanock, Wong-Ho Chow, and Nathaniel Rothman

Precis: Findings establish that renal cancer risk from exposure to a suspected carcinogen is particularly high in genetically susceptible individuals.
Anti–Placental Growth Factor Reduces Bone Metastasis by Blocking Tumor Cell Engraftment and Osteoclast Differentiation
Lieve Coenegrachts, Christa Maes, Sophie Torrekens, Riet Van Looveren, Massimiliano Mazzone, Theresa A. Guise, Roger Bouillon, Jean-Marie Stassen, Peter Carmeliet, and Geert Carmeliet

Precis: Preclinical findings indicate a key role for placental growth factor in promoting bone metastasis, suggesting an opportunity for antibody-based adjuvant therapy.

The Human WRN and BLM RecQ Helicases Differentially Regulate Cell Proliferation and Survival after Chemotherapeutic DNA Damage
Frances J. Mao, Julia M. Sidorova, Julia M. Lauper, Mary J. Emond, and Raymond J. Monnat

Precis: Study reveals how different RecQ DNA helicases modulate the response to distinct chemotherapeutic agents, and may have potential to serve as biomarkers of tumor-specific chemotherapeutic sensitivity.

Antitumor Effect after Radiofrequency Ablation of Murine Hepatoma Is Augmented by an Active Variant of CC Chemokine Ligand 3/Macrophage Inflammatory Protein-1α
Norihito Iida, Yasunari Nakamoto, Tomohisa Baba, Hidetoshi Nakagawa, Eishiro Mizukoshi, Makoto Naito, Naofumi Mukaida, and Shuichi Kaneko

Precis: Findings illustrate the potential of chemokine-based immunotherapy to cooperate with radioablative therapies in clinic.

Targeting Wild-Type and Mutant p53 with Small Molecule CP-31398 Blocks the Growth of Rhabdomyosarcoma by Inducing Reactive Oxygen Species–Dependent Apoptosis
Jianmin Xu, Laura Timares, Clay Heilpern, Zhiping Weng, Changzhao Li, Hui Xu, Joseph G. Pressey, Craig A. Elmets, Levy Kopelovich, and Mohammad Athar

Precis: A novel small molecule-based strategy to modulate p53 function exerts antitumor activity in a common and aggressive type of childhood soft tissue cancer.

Mitochondrial Chaperone Trap1 and the Calcium Binding Protein Sorcin Interact and Protect Cells against Apoptosis Induced by Antibiotic Agents
Matteo Landriscina, Gabriella Laudiero, Francesca Maddalena, Maria Rosaria Amoroso, Annamaria Piscazzi, Flora Cozzolino, Maria Monti, Corrado Garbi, Alberto Fersini, Piero Pucci, and Franca Esposito

Precis: A novel mechanism of apoptosis resistance is described that may contribute to chemoresistance in colorectal carcinoma cells.

Responses in Mantle Cell Lymphoma Cells to SNS-032 Depend on the Biological Context of Each Cell Line
Rong Chen, Sherri Chubb, Tiewei Cheng, Rachael E. Hawtin, Varsha Gandhi, and William Plunkett

Precis: Findings emphasize the challenges of applying targeted therapeutics to consistent effect in heterogeneous human tumors without full knowledge of their biological context.
Dvl2 Promotes Intestinal Length and Neoplasia in the Apc\textsuperscript{Min} Mouse Model for Colorectal Cancer
Ciara Metcalfe, Ashraf E.K. Ibrahim, Michael Graeb, Marc de la Roche, Thomas Schwarz-Romond, Marc Fiedler, Douglas J. Winton, Anthony Corfield, and Mariann Bienz

Precis: A potential positive modifier of colorectal cancer may act to coordinately promote beta-catenin and mTOR signaling.

Presence of a Putative Tumor-Initiating Progenitor Cell Population Predicts Poor Prognosis in Smokers with Non–Small Cell Lung Cancer
Aik T. Ooi, Vei Mah, Derek W. Nickerson, Jennifer L. Gilbert, Vi Luan Ha, Ahmed E. Hegab, Steve Horvath, Mohammad Alavi, Erin L. Maresh, David Chia, Adam C. Gower, Marc E. Lenburg, Avrum Spira, Luisa M. Solis, Ignacio I. Wistuba, Tonya C. Walser, William D. Wallace, Steven M. Dubinett, Lee Goodglick, and Brigitte N. Gomperts

Precis: A reparative progenitor airway epithelial cell that undergoes dysregulated repair in precancerous lesions is associated with poor prognosis in lung cancer.

Metastasis-Associated Protein 1 and Its Short Form Variant Stimulates Wnt\textsubscript{1} Transcription through Promoting Its Derepression from Six3 Corepressor
Rakesh Kumar, Seetharaman Balasenthil, Bramanandam Manavathi, Suresh K. Rayala, and Suresh B. Pakala

Precis: Findings define the transcriptional mechanism through which an important metastatic driver regulates Wnt expression.

Intratumoral Localization of Aromatase and Interaction between Stromal and Parenchymal Cells in the Non–Small Cell Lung Carcinoma Microenvironment
Yasuhiro Miki, Takashi Suzuki, Keiko Abe, Satoshi Suzuki, Hiromichi Niikawa, Shinya Iida, Shuko Hata, Jun-ichi Akahira, Kazushige Mori, Dean B. Evans, Takashi Kondo, Hisafumi Yamada-Okabe, and Hironobu Sasano

Precis: Findings reveal regulation of aromatase expression in the lung carcinoma microenvironment that contributes to carcinogenesis.

Akt3-Mediated Resistance to Apoptosis in B-RAF–Targeted Melanoma Cells
Yongping Shao and Andrew E. Aplin

Precis: Resistance mechanisms that arise to B-RAF inhibitors need to be elucidated to optimize the clinical application of this class of experimental agents.

Retraction: Spontaneous Human Adult Stem Cell Transformation
Ricardo de la Fuente, Antonio Bernad, Javier Garcia-Castro, Maria C. Martin, and Juan C. Cigudosa

Correction: Effective Immunotherapy against Murine Gliomas Using Type I Polarizing Dendritic Cells—Significant Roles of CXCL10

Correction: Cell Surface Tetraspanin Tspan8 Contributes to Molecular Pathways of Exosome-Induced Endothelial Cell Activation
ABOUT THE COVER

Representative images from an immunohistochemical analysis of Six3 (upper panels) and β-catenin (lower panels) in virgin mammary glands from 12-week-old wild-type and MTA1/MTA1s −/− mice. Genetic depletion of MTA1/MTA1s leads to increased expression of Six3, a corepressor of Wnt1 transcription, and consequently, to downregulation of β-catenin in mammary glands. For details, see the article by Kumar and colleagues on page 6649 of this issue.
Cancer Research

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