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3246 An Autoimmune Response Signature Associated with the Development of Triple-Negative Breast Cancer Reflects Disease Pathogenesis
Hiroyuki Katayama, Clayton Boldt, Jon J. Ladd, Melissa M. Johnson, Timothy Chao, Michela Capello, Jinfeng Suo, Jianming Mao, JoAnn E. Manson, Ross Prentice, Francisco Esteva, Hong Wang, Mary L. Disis, and Samir Hanash

3255 Endothelial Thermotolerance Impairs Nanoparticle Transport in Tumors
Alexander F. Bagley, Ruth Scherz-Shouval, Peter A. Galie, Angela Q. Zhang, Jeffrey Wyckoff, Luke Whitesell, Christopher S. Chen, Susan Lindquist, and Sangatea N. Bhattacharya

Précis: These findings reveal complexity in the role of IL6 signaling at different stages of lung cancer development, improving pathophysiological understanding in this disease and rationalizing IL6/STAT3 targeting therapies there.

Précis: A novel noninvasive imaging technology may improve monitoring of human breast tissue microarchitecture for benign and malignant lesions, including for rapid, intraoperative assessment of tumor margins during surgery.

Précis: Humoral responses to ‘triple negative’ breast cancers, which occur in patients themselves, are composed of a dynamic repertoire of autoimmune antigens, illustrating the nature of cancer pathogenesis as an abortive autoimmune response against altered-self.

Précis: Nanomaterials that assist the delivery of therapeutics into solid tumors are desired, but molecular adaptations in the tumor endothelium may counteract these effects, with direct consequences for therapeutic efficacy.
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- **3327** Proteolysis of EphA2 Converts It from a Tumor Suppressor to an Oncoprotein
  - Naoihiko Koshikawa, Daisuke Hoshino, Hiroaki Taniguchi, Tomoko Minegishi, Taizo Tomari, Sung-Ouk Nam, Mikiko Aoki, Takayuki Sueta, Takashi Nakagawa, Shingo Miyamoto, Kazuki Nabeshima, Alissa M. Weaver, and Motoharu Seki

- **3340** Naturally Occurring Mutations in the MPS1 Gene Predispose Cells to Kinase Inhibitor Drug Resistance

- **3355** Therapeutic Targeting of the Warburg Effect in Pancreatic Cancer Relies on an Absence of p53 Function
  - N.V. Rajeshkumar, Prasanta Dutta, Shinichi Yabuuchi, Roeland F. de Wilde, Gary V. Martínez, Anne Le, Jurje J. Kamphorst, Joshua D. Rabinowitz, Sanjay K. Jain, Manuel Hidalgo, Chi V. Dang, Robert J. Gillies, and Manuel Hidalgo
A Polymer-Based Antibody–Vinca Drug Conjugate Platform: Characterization and Preclinical Efficacy
Alexander V. Yurkovetskiy, Mao Yin, Natalya Bodak, Cheri A. Stevenson, Joshua D. Thomas, Charles E. Hammond, Liuliang Qin, Bangmin Zhu, Dmitry R. Gumerov, Elena Ter-Ovanesyan, Alex Uttard, and Timothy B. Lowinger

Précis: This study shows how efficacious antibody-drug conjugates can be prepared based on a novel, polymer-based conjugation approach that overcomes physicochemical limitations, enabling higher drug-antibody ratios and therefore uses for less potent drug payloads.

Depleting MET-Expressing Tumor Cells by ADCC Provides a Therapeutic Advantage over Inhibiting HGF/MET Signaling
Anna Hultberg, Virginia Morello, Leander Huyghe, Natalie De Jonge, Christophe Blanchetot, Valérie Hansens, Gitte De Boeck, Karen Silence, Els Festjens, Raimond Heukers, Benjamin Roux, Fabienne Lamballe, Christophe Ginestier, Emmanuelle Charafe-Jauffret, Flavio Maina, Peter Brouckaert, Michael Saunders, Alain Thibault, Torsten Dreier, Hans de Haard, and Paolo Michieli

Précis: These findings offer evidence that killing MET-expressing cancer cells by ADCC is therapeutically more advantageous than simply inhibiting HGF/MET signaling, based on studies of a novel ADCC-enhanced anti-MET antibody entering clinical development.

Oncogenic G Protein GNAQ Induces Uveal Melanoma and Intravasation in Mice
Jenny Li-Ying Huang, Oscar Urtatiz, and Catherine D. Van Raamsdonk

Précis: This study reports the first transgenic mouse model of uveal melanoma, one of the most aggressive cancers, which will be useful for developing in vivo understanding of etiology and metastatic progression of this disease.

Diverse Targets of β-Catenin during the Epithelial–Mesenchymal Transition Define Cancer Stem Cells and Predict Disease Relapse
Yi-Wen Chang, Ying-Hsin Su, Michael Hsiao, Kuo-Chen Wei, Wei-Hsin Lin, Chi-Jung Liang, Shih-Cheh Chen, and Jia-Lin Lee

Précis: In discovering that Wnt signaling must accompany the epithelial-mesenchymal transition to generate cancer stem-like cells, this study defines a five-gene signature for these cells that may be a valuable prognostic marker in lung cancer patients.

PML/RARA-Regulated miR-181a/b Cluster Targets the Tumor Suppressor RASSF1A in Acute Promyelocytic Leukemia
Daniela Bräuer-Hartmann, Jens-Uwe Hartmann, Alexander Arthur Wurm, Dennis Gerloff, Christiane Katzerke, Maria Vittoria Verga Falzacappa, Pier Giuseppe Pellici, Carsten Müller-Tidow, Daniel G. Tenen, Dietger Niederwieser, and Gerhard Behre

Précis: These findings identify a pivotal microRNA cluster and tumor suppressor gene as determinants of the outgrowth versus effective therapeutic control of acute promyelocytic leukemias.
ABOUT THE COVER

Radiation-induced gastrointestinal toxicity is highly relevant to the treatment of pancreatic cancer with radiation. To determine if pharmacological ascorbate changes the response of the gastrointestinal tract following radiation in a clinically meaningful way, a crypt cell assay was performed. The addition of pharmacological ascorbate partially reversed the decreases in jejunal crypt regeneration in both the 10 Gy and 13 Gy groups of mice, suggesting that ascorbate may protect the gastrointestinal tract from the damaging effects of radiation. For details, see article by Du and colleagues on page 3314.