Highlights of This Issue  6367

SPECIAL FEATURES

CCR Translations

6369  Therapeutic Oligonucleotides: The Road Not Taken
      Cy A. Stein and Sanjay Goel
      See commentary p. 6582

Molecular Pathways

6373  The Role of Erythropoietin and Erythropoiesis-Stimulating Agents in Tumor Progression
      Benjamin D. Hedley, Alison L. Allan, and Anargyros Xenocostas

6381  TLX1-Induced T-cell Acute Lymphoblastic Leukemia
      Kim De Keersmaecker and Adolfo A. Ferrando

CCR Focus

6388  Antibody Conjugates: The Future Is Now
      Susan E. Bates

6389  Antibody Conjugate Therapeutics: Challenges and Potential
      Beverly A. Teicher and Ravi V.J. Chari

6398  Antibody Fusion Proteins: Anti-CD22 Recombinant Immunotoxin Moxetumomab Pasudotox
      Robert J. Kreitman and Ira Pastan

6406  Antibody-Radiouclide Conjugates for Cancer Therapy: Historical Considerations and New Trends
      Martina Steiner and Dario Neri

6417  Antibody-Drug Conjugates of Calicheamicin Derivative: Gentuzumab Ozogamicin and Inotuzumab Ozogamicin
      Alejandro D. Ricart

6428  Brentuximab Vedotin (SGN-35)
      Jessica Katz, John E. Janik, and Anas Younes

6437  Trastuzumab Emtansine: A Unique Antibody-Drug Conjugate in Development for Human Epidermal Growth Factor Receptor 2–Positive Cancer
      Patricia M. LoRusso, Denise Weiss, Ellie Guardino, Sandhya Girish, and Mark X. Slawkowski

6448  SAR3419: An Anti-CD19-Maytansinoid Immunoconjugate for the Treatment of B-Cell Malignancies
      Veronique Blanc, Anne Bousseau, Anne Caron, Chantal Carrez, Robert J. Lutz, and John M. Lambert

6459  Polo-like Kinase 1 Inhibitors and Their Potential Role in Anticancer Therapy, with a Focus on NSCLC
      René H. Medema, Chia-Chi Lin, and James Chih-Hsin Yang

CANCER THERAPY: PRECLINICAL

6467  Tumor-Derived Autophagosome Vaccine: Induction of Cross-Protective Immune Responses against Short-lived Proteins through a p62-Dependent Mechanism
      Christopher G. Twitty, Shawn M. Jensen, Hong-Ming Hu, and Bernard A. Fox

6482  Synergistic Action of a RAF Inhibitor and a Dual PI3K/mTOR Inhibitor in Thyroid Cancer
      Ning Jin, Tianyin Jiang, David M. Rosen, Barry D. Nelkin, and Douglas W. Ball

6490  The Novel Chemical Entity YTR107 Inhibits Recruitment of Nucleophosmin to Sites of DNA Damage, Suppressing Repair of DNA Double-Strand Breaks and Enhancing Radiosensitization
**Significant Biological Role of Sp1 Transactivation in Multiple Myeloma**

**Dicer-Mediated Upregulation of BCRP Confers Tamoxifen Resistance in Human Breast Cancer Cells**

**EGFR- and VEGF(R)-Targeted Small Molecules Show Synergistic Activity in Colorectal Cancer Models Refractory to Combinations of Monoclonal Antibodies**
Virginie Poindessous, Djamila Ouaret, Karima El Ouadrani, Aude Battistella, Virginie F. Pegalophonos, Nyam Kamsu-Kom, Amélie Petitetprez, Alexandre E. Escargueil, Pascaline Boudou, Sylvie Dumont, Pascale Cervera, Jean-François Fléjou, Thierry André, Christophe Tournigand, Benoist Chibaudel, Aimery de Gramont, and Annette K. Larsen

**Toll-like Receptor 9 Agonist IMO Cooperates with Cetuximab in K-Ras Mutant Colorectal and Pancreatic Cancers**
Roberta Rosa, Davide Melisi, Vincenzo Damiano, Roberto Bianco, Sonia Garofalo, Teresa Gelardi, Sudhir Agrawal, Alberto Bardelli, and Giampaolo Tortora

**High XRCC1 Protein Expression Is Associated with Poorer Survival in Patients with Head and Neck Squamous Cell Carcinoma**

**Discriminant Analysis of 18F-Fluorothymidine Kinetic Parameters to Predict Survival in Patients with Recurrent High-Grade Glioma**
Mirwais Wardak, Christiaan Schiepers, Magnus Dahlbom, Timothy Cloughesy, Wei Chen, NagiChettiar Satyamurthy, Johannes Czernin, Michael E. Phelps, and Sung-Cheng Huang

**PTEN Protein Loss by Immunostaining: Analytic Validation and Prognostic Indicator for a High Risk Surgical Cohort of Prostate Cancer Patients**
Tamara L. Lotan, Bora Gurel, Siobhan Sutcliffe, David Esopi, Wenman Liu, Junfeng Xu, Jessica L. Hicks, Ben H. Park, Elizabeth Humphreys, Alan W. Partin, Misop Han, George J. Netto, William B. Isaacs, and Angelo M. De Marzo

**Aflibercept (VEGF Trap) in Inoperable Stage III or Stage IV Melanoma of Cutaneous or Uveal Origin**
Ahmad A. Tarhini, Paul Frankel, Kim A. Margolin, Scott Christensen, Christopher Ruel, Janice Shipe-Spotloe, David R. Gandara, Alice Chen, and John M. Kirkwood

**A Phase I Dose Escalation, Pharmacokinetic, and Pharmacodynamic Evaluation of eIF-4E Antisense Oligonucleotide LY2275796 in Patients with Advanced Cancer**

See article p. 6369

**Comparison of Continuous versus Categorical Tumor Measurement-Based Metrics to Predict Overall Survival in Cancer Treatment Trials**
Ming-Wen An, Sumithra J. Mandrekar, Megan E. Branda, Shauna L. Hillman, Alex A. Adjei, Henry C. Pitot, Richard M. Goldberg, and Daniel J. Sargent
LETTERS TO THE EDITOR

KRAS rs61764370 in Epithelial Ovarian Cancer–Letter
Joanne B. Weidhaas and Frank J. Slack

KRAS rs61764370 in Epithelial Ovarian Cancer–Response
Harvey A. Risch, Andrew Berchuck, and Paul D.P. Pharoah; for the Ovarian Cancer Association Consortium

ABOUT THE COVER

The work by Poindessous and colleagues shows that inhibition of EGFR- and VEGF(R)-signaling by combinations of two small molecule tyrosine kinase inhibitors (TKI), afatinib and vargafe, has synergistic activity in colorectal cancer models that are refractory to combinations of the monoclonal antibodies cetuximab and bevacizumab. Importantly, only the TKIs were able to attenuate the phosphorylation of intracellular EGFR- and VEGFR-receptors which was accompanied by the induction of apoptotic cell death as indicated by TUNEL staining (nuclear DNA in blue, apoptotic nuclei in white). This work provides a rationale for clinical trials of the afatinib and vargafe combination, even in patients with mutant KRAS. For details, see the article by Poindessous and colleagues on page 6522 of this issue.