

SPECIAL FEATURES

CCR Pediatric Oncology Series

Complimentary access to this online-only series of articles from the AACR Childhood Cancer Predisposition Workshop: clincancerres.aacrjournals.org/pediatricseries

- e1** **Pediatric Cancer Predisposition and Surveillance: An Overview, and a Tribute to Alfred G. Knudson Jr**
Garrett M. Brodeur, Kim E. Nichols, Sharon E. Plon, Joshua D. Schiffman, and David Malkin
- e6** **Pediatric Cancer Predisposition Imaging: Focus on Whole-Body MRI**
Mary-Louise C. Greer, Stephan D. Voss, and Lisa J. States
- e14** **Recommendations for Surveillance for Children with Leukemia-Predisposing Conditions**
Christopher C. Porter, Todd E. Druley, Ayelet Erez, Roland P. Kuiper, Kenan Onel, Joshua D. Schiffman, Kami Wolfe Schneider, Sarah R. Scollon, Hamish S. Scott, Louise C. Strong, Michael F. Walsh, and Kim E. Nichols
- e23** **Recommendations for Childhood Cancer Screening and Surveillance in DNA Repair Disorders**
Michael F. Walsh, Vivian Y. Chang, Wendy K. Kohlmann, Hamish S. Scott, Christopher Cunniff, Franck Bourdeaut, Jan J. Molenaar, Christopher C. Porter, John T. Sandlund, Sharon E. Plon, Lisa L. Wang, and Sharon A. Savage
- e32** **Clinical Management and Tumor Surveillance Recommendations of Inherited Mismatch Repair Deficiency in Childhood**
Uri Tabori, Jordan R. Hansford, Maria Isabel Achatz, Christian P. Kratz, Sharon E. Plon, Thierry Frebourg, and Laurence Brugières
- e38** **Cancer Screening Recommendations for Individuals with Li-Fraumeni Syndrome**
Christian P. Kratz, Maria Isabel Achatz, Laurence Brugières, Thierry Frebourg, Judy E. Garber, Mary-Louise C. Greer, Jordan R. Hansford, Katherine A. Janeway, Wendy K. Kohlmann, Rose McGee, Charles G. Mullighan, Kenan Onel, Kristian W. Pajtler, Stefan M. Pfister, Sharon A. Savage, Joshua D. Schiffman, Katherine A. Schneider, Louise C. Strong, D. Gareth R. Evans, Jonathan D. Wasserman, Anita Villani, and David Malkin

Highlights of This Issue 2607

CCR Focus

- 2610** **Base Pairs to Populations**
Susan E. Bates
- 2611** **Unmet Needs in Clinical Research in Breast Cancer: Where Do We Need to Go?**
Ann H. Partridge and Lisa A. Carey
- 2617** **Mutational Signatures in Breast Cancer: The Problem at the DNA Level**
Serena Nik-Zainal and Sandro Morganello
- 2630** **Translational Genomics: Practical Applications of the Genomic Revolution in Breast Cancer**
Lucy R. Yates and Christine Desmedt
- 2640** **Immunotherapy for Breast Cancer: What Are We Missing?**
Robert H. Vonderheide, Susan M. Domchek, and Amy S. Clark
- 2647** **Emerging Data and Current Challenges for Young, Old, Obese, or Male Patients with Breast Cancer**
Rachel A. Freedman and Ann H. Partridge
- 2655** **Breast Cancer Disparities at Home and Abroad: A Review of the Challenges and Opportunities for System-Level Change**
Katherine E. Reeder-Hayes and Benjamin O. Anderson


CLINICAL TRIAL BRIEF REPORT

- 2665** **Adverse Metaphase Cytogenetics Can Be Overcome by Adding Bortezomib and Thalidomide to Fractionated Melphalan Transplants**
Yogesh S. Jethava, Alan Mitchell, Joshua Epstein, Maurizio Zangari, Shmuel Yacoby, Erming Tian, Sarah Waheed, Rashid Khan, Xenofon Papanikolaou, Monica Graziutti, Michele Cottler-Fox, Nathan Petty, Douglas Steward, Susan Panozzo, Clyde Bailey, Antje Hoering, John Crowley, Jeffrey Sawyer, Gareth Morgan, Bart Barlogie, and Frits van Rhee





Table of Contents

CANCER THERAPY: CLINICAL

- 2673** Phase I Study of Epigenetic Priming with Azacitidine Prior to Standard Neoadjuvant Chemotherapy for Patients with Resectable Gastric and Esophageal Adenocarcinoma: Evidence of Tumor Hypomethylation as an Indicator of Major Histopathologic Response
Bryan J. Schneider, Manish A. Shah, Kelsey Klute, Allyson Ocean, Elizabeta Popa, Nasser Altorki, Michael Lieberman, Andrew Schreiner, Rhonda Yantiss, Paul J. Christos, Romae Palmer, Daoqi You, Agnes Viale, Pouneh Kermani, and Joseph M. Scandura
- 2681** Circulating Tumor Cells Expressing Markers of Tumor-Initiating Cells Predict Poor Survival and Cancer Recurrence in Patients with Pancreatic Ductal Adenocarcinoma
Katherine E. Poruk, Amanda L. Blackford, Matthew J. Weiss, John L. Cameron, Jin He, Michael Goggins, Zeshaan A. Rasheed, Christopher L. Wolfgang, and Laura D. Wood
- 2691** Combination Epigenetic Therapy in Advanced Breast Cancer with 5-Azacitidine and Entinostat: A Phase II National Cancer Institute/Stand Up to Cancer Study
Roisin M. Connolly, Huili Li, Rachel C. Jankowitz, Zhe Zhang, Michelle A. Rudek, Stacie C. Jeter, Shannon A. Slater, Penny Powers, Antonio C. Wolff, John H. Fetting, Adam Brufsky, Richard Piekartz, Nita Ahuja, Peter W. Laird, Hui Shen, Daniel J. Weisenberger, Leslie Cope, James G. Herman, George Somlo, Agustin A. Garcia, Peter A. Jones, Stephen B. Baylin, Nancy E. Davidson, Cynthia A. Zahnow, and Vered Stearns
- 2702** The Prognostic Role of Androgen Receptor in Patients with Early-Stage Breast Cancer: A Meta-analysis of Clinical and Gene Expression Data
 Ivana Bozovic-Spasojevic, Dimitrios Zardavas, Sylvain Brohée, Lieveke Ameye, Debora Fumagalli, Felipe Ades, Evandro de Azambuja, Yacine Bareche, Martine Piccart, Marianne Paesmans, and Christos Sotiriou

PERSONALIZED MEDICINE AND IMAGING

- 2713** Integrative Analysis Identifies a Novel AXL–PI3 Kinase–PD-L1 Signaling Axis Associated with Radiation Resistance in Head and Neck Cancer
 Heath D. Skinner, Uma Giri, Liang P. Yang, Manish Kumar, Ying Liu, Michael D. Story, Curtis R. Pickering, Lauren A. Byers, Michelle D. Williams, Jing Wang, Li Shen, Suk Y. Yoo, You Hong Fan, David P. Molkenkine, Beth M. Beadle, Raymond E. Meyn, Jeffrey N. Myers, and John V. Heymach

- 2723** E6 and E7 Antibody Levels Are Potential Biomarkers of Recurrence in Patients with Advanced-Stage Human Papillomavirus–Positive Oropharyngeal Squamous Cell Carcinoma
Matthew E. Spector, Assuntina G. Sacco, Emily Bellile, Jeremy M.G. Taylor, Tamara Jones, Kan Sun, William C. Brown, Andrew C. Birkeland, Carol R. Bradford, Gregory T. Wolf, Mark E. Prince, Jeffrey S. Moyer, Kelly Malloy, Paul Swiecicki, Avraham Eisbruch, Jonathan B. McHugh, Douglas B. Chepeha, Laura Rozek, and Francis P. Worden
- 2730** Tumor-Specific Uptake of Fluorescent Bevacizumab–IRDye800CW Microdosing in Patients with Primary Breast Cancer: A Phase I Feasibility Study
 Laetitia E. Lamberts, Maximilian Koch, Johannes S. de Jong, Arthur L.L. Adams, Jürgen Glatz, Mariëtte E.G. Kranendonk, Anton G.T. Terwisscha van Scheltinga, Liesbeth Jansen, Jakob de Vries, Marjolijn N. Lub-de Hooge, Carolien P. Schröder, Annelies Jorritsma-Smit, Matthijs D. Linssen, Esther de Boer, Bert van der Vegt, Wouter B. Nagengast, Sjoerd G. Elias, Sabrina Oliveira, Arjen J. Witkamp, Willem P.Th.M. Mali, Elsken Van der Wall, Paul J. van Diest, Elisabeth G.E. de Vries, Vasilis Ntziachristos, and Gooitzen M. van Dam
- 2742** BRAF and NRAS Locus-Specific Variants Have Different Outcomes on Survival to Colorectal Cancer
Matthew G. Summers, Christopher G. Smith, Timothy S. Maughan, Richard Kaplan, Valentina Escott-Price, and Jeremy P. Cheadle
- 2750** A Glycomics-Based Test Predicts the Development of Hepatocellular Carcinoma in Cirrhosis
Xavier Verhelst, Dieter Vanderschaege, Laurent Castéra, Tom Raes, Anja Geerts, Claire Francoz, Roos Colman, François Durand, Nico Callewaert, and Hans Van Vlierberghe
- 2759** Bone Marrow Cell Trafficking Analyzed by ⁸⁹Zr-oxine Positron Emission Tomography in a Murine Transplantation Model
Kingsley O. Asiedu, Sho Koyasu, Lawrence P. Szajek, Peter L. Choyke, and Noriko Sato


CANCER THERAPY: PRECLINICAL

- 2769** ADNP Is a Therapeutically Inducible Repressor of WNT Signaling in Colorectal Cancer
Cristina Blaj, Agnes Bringmann, Eva Marina Schmidt, Manuela Urbischek, Sebastian Lamprecht, Thomas Fröhlich, Georg J. Arnold, Stefan Krebs, Helmut Blum, Heiko Hermeking, Andreas Jung, Thomas Kirchner, and David Horst

Table of Contents

- 2781** AMPK–ULK1-Mediated Autophagy Confers Resistance to BET Inhibitor JQ1 in Acute Myeloid Leukemia Stem Cells
Ji Eun Jang, Ju-In Eom, Hoi-Kyung Jeung, June-Won Cheong, Jung Yeon Lee, Jin Seok Kim, and Yoo Hong Min
- 2795** Combined Inhibition of Both p110 α and p110 β Isoforms of Phosphatidylinositol 3-Kinase Is Required for Sustained Therapeutic Effect in PTEN-Deficient, ER⁺ Breast Cancer
Sarah R. Hosford, Lloye M. Dillon, Stephanie J. Bouley, Rachele Rosati, Wei Yang, Vivian S. Chen, Eugene Demidenko, Rocco P. Morra Jr, and Todd W. Miller
- 2806** Therapeutic Activity of Anti-AXL Antibody against Triple-Negative Breast Cancer Patient-Derived Xenografts and Metastasis
Wilhem Leconet, Myriam Chentouf, Stanislas du Manoir, Clément Chevalier, Audrey Sirvent, Imade Ait-Arsa, Muriel Busson, Marta Jarlier, Nina Radosevic-Robin, Charles Theillet, Dany Chalbos, Jean-Max Pasquet, André Pèlegri, Christel Larbouret, and Bruno Robert
- 2817** Heterodimeric IL15 Treatment Enhances Tumor Infiltration, Persistence, and Effector Functions of Adoptively Transferred Tumor-specific T Cells in the Absence of Lymphodepletion
 Sinnie Sin Man Ng, Bethany A. Nagy, Shawn M. Jensen, Xintao Hu, Candido Alicea, Bernard A. Fox, Barbara K. Felber, Cristina Bergamaschi, and George N. Pavlakis
- 2831** The Bruton Tyrosine Kinase (BTK) Inhibitor Acalabrutinib Demonstrates Potent On-Target Effects and Efficacy in Two Mouse Models of Chronic Lymphocytic Leukemia
Sarah E.M. Herman, Arnau Montraveta, Carsten U. Niemann, Helena Mora-Jensen, Michael Gulrajani, Fanny Krantz, Rose Mantel, Lisa L. Smith, Fabienne McClanahan, Bonnie K. Harrington, Dolores Colomer, Todd Covey, John C. Byrd, Raquel Izumi, Allard Kaptein, Roger Ulrich, Amy J. Johnson, Brian J. Lannutti, Adrian Wiestner, and Jennifer A. Woyach
- 2842** Gas6/AXL Signaling Regulates Self-Renewal of Chronic Myelogenous Leukemia Stem Cells by Stabilizing β -Catenin
Yanli Jin, Danian Nie, Juan Li, Xin Du, Yuhong Lu, Yangqiu Li, Chang Liu, Jingfeng Zhou, and Jingxuan Pan
- 2856** Dual ALK and CDK4/6 Inhibition Demonstrates Synergy against Neuroblastoma
Andrew C. Wood, Kateryna Krytska, Hannah T. Ryles, Nicole R. Infarinato, Renata Sano, Theodore D. Hansel, Lori S. Hart, Frederick J. King, Timothy R. Smith, Edward Ainscow, Kathryn B. Grandinetti, Tove Tuntland, Sunkyu Kim, Giordano Caponigro, You Qun He, Shiva Krupa, Nanxin Li, Jennifer L. Harris, and Yaël P. Mossé
- 2869** Disruption of Autophagic Degradation with ROC-325 Antagonizes Renal Cell Carcinoma Pathogenesis
Jennifer S. Carew, Claudia M. Espitia, William Zhao, Yingchun Han, Valeria Visconte, James Phillips, and Steffan T. Nawrocki
- 2880** Drug-Repositioning Screens Identify Triamterene as a Selective Drug for the Treatment of DNA Mismatch Repair Deficient Cells
 Delphine Guillotin, Philip Austin, Rumena Begum, Marta O. Freitas, Ashirwad Merve, Tim Brend, Susan Short, Silvia Marino, and Sarah A. Martin

BIOLOGY OF HUMAN TUMORS

- 2891** Combining Anti-Mir-155 with Chemotherapy for the Treatment of Lung Cancers
Katrien Van Roosbroeck, Francesca Fanini, Tetsuro Setoyama, Cristina Ivan, Cristian Rodriguez-Aguayo, Enrique Fuentes-Mattei, Lianchun Xiao, Ivan Vannini, Roxana S. Redis, Lucilla D'Abundo, Xinna Zhang, Milena S. Nicoloso, Simona Rossi, Vianey Gonzalez-Villasana, Rajesha Rupaimoole, Manuela Ferracin, Fortunato Morabito, Antonino Neri, Peter P. Ruvolo, Vivian R. Ruvolo, Chad V. Pecot, Dino Amadori, Lynne Abruzzo, Steliana Calin, Xuemei Wang, M. James You, Alessandra Ferrajoli, Robert Orłowski, William Plunkett, Tara M. Lichtenberg, Ramana V. Davuluri, Ioana Berindan-Neagoe, Massimo Negrini, Ignacio I. Wistuba, Hagop M. Kantarjian, Anil K. Sood, Gabriel Lopez-Berestein, Michael J. Keating, Muller Fabbri, and George A. Calin
- 2905** microRNA-221 Enhances MYCN via Targeting Nemo-like Kinase and Functions as an Oncogene Related to Poor Prognosis in Neuroblastoma
 Xiao-yan He, Zheng-lan Tan, Qin Mou, Fang-jie Liu, Shan Liu, Chao-wen Yu, Jin Zhu, Lin-ya Lv, Jun Zhang, Shan Wang, Li-ming Bao, Bin Peng, Hui Zhao, and Lin Zou


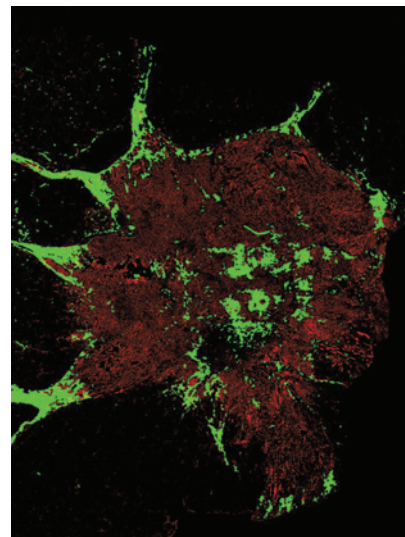
 AC icon indicates AuthorChoice
For more information please visit www.aacrjournals.org



Table of Contents

ABOUT THE COVER

The cover shows patients with primary breast cancer colocalization of VEGF-A expression (red) and a systemically injected near-infrared fluorescent tracer bevacizumab-IRDye800CW (green) through Multiplex Advanced Pathology Imaging (MAPI). For details, see the article by Lamberts and colleagues on page 2730 of this issue.



Clinical Cancer Research

23 (11)

Clin Cancer Res 2017;23:e1-2918.

Updated version Access the most recent version of this article at:
<http://clincancerres.aacrjournals.org/content/23/11>

E-mail alerts [Sign up to receive free email-alerts](#) related to this article or journal.

Reprints and Subscriptions To order reprints of this article or to subscribe to the journal, contact the AACR Publications Department at pubs@aacr.org.

Permissions To request permission to re-use all or part of this article, use this link <http://clincancerres.aacrjournals.org/content/23/11>.
Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.