

SPECIAL FEATURES

Highlights of This Issue 7267

CCR Translations

7269 A New Pathway Emerges to Interpret Lung Cancer Genomic Alterations

Collin M. Blakely
See related article, p. 7475

7272 Mogamulizumab Forecast: Clearer Patients, with a Slight Chance of Immune Mayhem

Cecilia Larocca, Thomas S. Kupper, and Nicole R. LeBoeuf
See related article, p. 7275

CCR Drug Updates

7275 FDA Approval Summary: Mogamulizumab-kpkc for Mycosis Fungoides and Sézary Syndrome

Yvette L. Kasamon, Haiyan Chen, R. Angelo de Claro, Lei Nie, Jingjing Ye, Gideon M. Blumenthal, Ann T. Farrell, and Richard Pazdur
See related commentary, p. 7272

Perspectives

7281 Lessons Learned from Deescalation Trials in Favorable Risk HPV-Associated Squamous Cell Head and Neck Cancer—A Perspective on Future Trial Designs

Steffen Ventz, Lorenzo Trippa, and Jonathan D. Schoenfeld

CLINICAL TRIALS: TARGETED THERAPY

7287 Phase I Study of Rapid Alternation of Sunitinib and Regorafenib for the Treatment of Tyrosine Kinase Inhibitor Refractory Gastrointestinal Stromal Tumors

César Serrano, Alessandro Leal, Yanan Kuang, Jeffrey A. Morgan, Constance M. Barysaukas, Jillian Phallen, Olivia Triplett, Adrián Mariño-Enríquez, Andrew J. Wagner, George D. Demetri, Victor E. Velculescu, Cloud P. Paweletz, Jonathan A. Fletcher, and Suzanne George

7294 A Phase I and Pharmacokinetic Study of Oral Dabrafenib in Children and Adolescent Patients with Recurrent or Refractory *BRAF* V600 Mutation–Positive Solid Tumors

Mark W. Kieran, Birgit Geoerger, Ira J. Dunkel, Alberto Broniscer, Darren Hargrave, Pooja Hingorani, Isabelle Aerts, Anne-Isabelle Bertozzi, Kenneth J. Cohen, Trent R. Hummel, Violet Shen, Eric Bouffet, Christine A. Pratilas, Andrew D.J. Pearson, Lillian Tseng, Noelia Nebot, Steven Green, Mark W. Russo, and James A. Whitlock

7303 Efficacy and Safety of Dabrafenib in Pediatric Patients with *BRAF* V600 Mutation–Positive Relapsed or Refractory Low-Grade Glioma: Results from a Phase I/IIa Study

Darren R. Hargrave, Eric Bouffet, Uri Tabori, Alberto Broniscer, Kenneth J. Cohen, Jordan R. Hansford, Birgit Geoerger, Pooja Hingorani, Ira J. Dunkel, Mark W. Russo, Lillian Tseng, Kohinoor Dasgupta, Eduard Gasal, James A. Whitlock, and Mark W. Kieran

7312 Crizotinib in *MET*-Deregulated or *ROS1*-Rearranged Pretreated Non–Small Cell Lung Cancer (METROS): A Phase II, Prospective, Multicenter, Two-Arms Trial

Lorenza Landi, Rita Chiari, Marcello Tiseo, Federica D'Inca, Claudio Dazzi, Antonio Chella, Angelo Delmonte, Laura Bonanno, Diana Giannarelli, Diego Luigi Cortinovis, Filippo de Marinis, Gloria Borra, Alessandro Morabito, Cesare Gridelli, Domenico Galetta, Fausto Barbieri, Francesco Grossi, Enrica Capelletto, Gabriele Minuti, Francesca Mazzoni, Claudio Verusio, Emilio Bria, Greta Ali, Rossella Bruno, Agnese Proietti, Gabriella Fontanini, Lucio Crinò, and Federico Cappuzzo

7320 Sorafenib Population Pharmacokinetics and Skin Toxicities in Children and Adolescents with Refractory/Relapsed Leukemia or Solid Tumor Malignancies

Hiroto Inaba, John C. Panetta, Stanley B. Pounds, Lei Wang, Lie Li, Fariba Navid, Sara M. Federico, Eric D. Eisenmann, Aksana Vasilyeva, Yong-Dong Wang, Sheila Shurtleff, Ching-Hon Pui, Tanja A. Gruber, Raul C. Ribeiro, Jeffrey E. Rubnitz, and Sharyn D. Baker

Table of Contents

7331 Phase I Study of the Novel Enhancer of Zeste Homolog 2 (EZH2) Inhibitor GSK2816126 in Patients with Advanced Hematologic and Solid Tumors

Timothy A. Yap, Jane N. Winter, Lisa Giulino-Roth, Jemma Longley, Juanita Lopez, Jean-Marie Michot, John P. Leonard, Vincent Ribrag, Michael T. McCabe, Caretha L. Creasy, Melissa Stern, Teodora Pene Dumitrescu, Xiaowei Wang, Steve Frey, Jennifer Carver, Thierry Horner, Choon Oh, Ahmed Khaled, Arindam Dhar, and Peter W.M. Johnson

CLINICAL TRIALS: IMMUNOTHERAPY

7340 T-Cell Receptor Stimulation Enhances the Expansion and Function of CD19 Chimeric Antigen Receptor–Expressing T Cells

Natalia Lapteva, Margaret Gilbert, Iulia Diaconu, Lisa A. Rollins, Mina Al-Sabbagh, Swati Naik, Robert A. Krance, Tamara Tripic, Manasa Hiregange, Darshana Raghavan, Olga Dakhova, Rayne H. Rouse, Hao Liu, Bilal Omer, Barbara Savoldo, Gianpietro Dotti, Conrad Russel Cruz, Keli Sharpe, Melissa Gates, Aaron Orozco, April Durett, Elizabeth Pacheco, Adrian P. Gee, Carlos A. Ramos, Helen E. Heslop, Malcolm K. Brenner, and Cliona M. Rooney

7351 Guadecitabine Plus Ipilimumab in Unresectable Melanoma: The NIBIT-M4 Clinical Trial



Anna Maria Di Giacomo, Alessia Covre, Francesca Finotello, Dietmar Rieder, Riccardo Danielli, Luca Sigalotti, Diana Giannarelli, Florent Petitprez, Laetitia Lacroix, Monica Valente, Ornella Cutaia, Carolina Fazio, Giovanni Amato, Andrea Lazzeri, Santa Monterisi, Clelia Miracco, Sandra Coral, Andrea Anichini, Christoph Bock, Amelie Nenc, Aram Ogenesian, James Lowder, Mohammad Azab, Wolf H. Fridman, Catherine Sautès-Fridman, Zlatko Trajanoski, and Michele Maio

7363 A Single-Arm, Multicenter, Phase II Study of Camrelizumab in Relapsed or Refractory Classical Hodgkin Lymphoma

Yuqin Song, Jianqiu Wu, Xinchuan Chen, Tongyu Lin, Junning Cao, Yanyan Liu, Yaozhong Zhao, Jie Jin, Haiwen Huang, Jianda Hu, Jun Luo, Liling Zhang, Hongwei Xue, Qingyuan Zhang, Weiwei Wang, Chunxia Chen, Jifeng Feng, and Jun Zhu

PRECISION MEDICINE AND IMAGING

7370 Analysis of Biomarkers and Association With Clinical Outcomes in Patients With Differentiated Thyroid Cancer: Subanalysis of the Sorafenib Phase III DECISION Trial

Marcia S. Brose, Martin Schlumbeger, Michael Jeffers, Christian Kappeler, Gerold Meinhardt, and Carol E.A. Peña

7381 Impact of FDG PET Imaging for Expanding Patient Eligibility and Measuring Treatment Response in a Genome-Driven Basket Trial of the Pan-HER Kinase Inhibitor, Neratinib

Gary A. Ulaner, Cristina Saura, Sarina A. Piha-Paul, Ingrid Mayer, David Quinn, Komal Jhaveri, Ben Stone, Seta Shahin, Grace Mann, Melanie Dujka, Richard Bryce, Funda Meric-Bernstam, David B. Solit, and David M. Hyman

7388 Long-Term Survival Analysis of Adjuvant Chemotherapy with or without Trastuzumab in Patients with T1, Node-Negative HER2-Positive Breast Cancer

Xuexin He, Jiali Ji, Mei Tian, Francisco J. Esteva, Gabriel N. Hortobagyi, and Sai-Ching Jim Yeung

7396 Discovery, Validation, and Application of Novel Methylated DNA Markers for Detection of Esophageal Cancer in Plasma

Yi Qin, Chung W. Wu, William R. Taylor, Tarek Sawas, Kelli N. Burger, Douglas W. Mahoney, Zhifu Sun, Tracy C. Yab, Graham P. Lidgard, Hatim T. Allawi, Navtej S. Buttar, Thomas C. Smyrk, Prasad G. Iyer, David A. Katzka, David A. Ahlquist, and John B. Kisiel

7405 Antibody Responses to Cancer Antigens Identify Patients with a Poor Prognosis among HPV-Positive and HPV-Negative Head and Neck Squamous Cell Carcinoma Patients

Simon Laban, Dominik S. Gangkofner, Dana Holzinger, Lea Schroeder, Stefan B. Eichmüller, Inka Zörnig, Dirk Jäger, Gunnar Wichmann, Andreas Dietz, Martina A. Broglie, Christel C. Herold-Mende, Gerhard Dyckhoff, Paolo Boscolo-Rizzo, Jasmin Ezić, Ralf Marienfeld, Peter Möller, Johann M. Kraus, Gunnar Völkel, Hans A. Kestler, Cornelia Brunner, Patrick J. Schuler, Marlene C. Wigand, Marie-Nicole Theodoraki, Johannes Doescher, Thomas K. Hoffmann, Michael Pawlita, Tim Waterboer, and Julia Butt

7413 Combination of TMB and CNA Stratifies Prognostic and Predictive Responses to Immunotherapy Across Metastatic Cancer

Li Liu, Xue Bai, Jian Wang, Xin-Ran Tang, De-Hua Wu, Sha-Sha Du, Xiu-Ju Du, Yao-Wei Zhang, Hong-Bo Zhu, Yuan Fang, Ze-Qin Guo, Qin Zeng, Xue-Jun Guo, Zhu Liu, and Zhong-Yi Dong

7424 Transcriptomic Analysis Reveals Prognostic Molecular Signatures of Stage I Melanoma



Rohit Thakur, Jonathan P. Laye, Martin Lauss, Joey Mark S. Diaz, Sally Jane O'Shea, Joanna Poźniak, Anastasia Filia, Mark Harland, Joanne Gascoyne, Juliette A. Randerson-Moor, May Chan, Tracey Mell, Göran Jönsson, D. Timothy Bishop, Julia Newton-Bishop, Jennifer H. Barrett, and Jérémie Nsengimana

Table of Contents

- 7436** Longitudinal Photoacoustic Imaging of the Pharmacodynamic Effect of Vascular Targeted Therapy on Tumors
S. Peter Johnson, Olumide Ogunlade, Mark F. Lythgoe, Paul Beard, and R. Barbara Pedley

- 7448** Prostate-Specific Membrane Antigen Ligand Positron Emission Tomography in Men with Nonmetastatic Castration-Resistant Prostate Cancer
Wolfgang P. Fendler, Manuel Weber, Amir Iravani, Michael S. Hofman, Jérémie Calais, Johannes Czernin, Harun Ilhan, Fred Saad, Eric J. Small, Matthew R. Smith, Paola M. Perez, Thomas A. Hope, Isabel Rauscher, Anil Londhe, Angela Lopez-Gitlitz, Shinta Cheng, Tobias Maurer, Ken Herrmann, Matthias Eiber, and Boris Hadaschik

- 7455** Predicting the 1p/19q Codeletion Status of Presumed Low-Grade Glioma with an Externally Validated Machine Learning Algorithm
Sebastian R. van der Voort, Fatih Incekara, Maarten M.J. Wijnenga, Georgios Kapas, Mayke Gardeniers, Joost W. Schouten, Martijn P.A. Starmans, Rishie Nandoe Tewarie, Geert J. Lycklama, Pim J. French, Hendrikus J. Dubbink, Martin J. van den Bent, Arnaud J.P.E. Vincent, Wiro J. Niessen, Stefan Klein, and Marion Smits

- 7463** ImmunoPET, [⁶⁴Cu]Cu-DOTA-Anti-CD33 PET-CT, Imaging of an AML Xenograft Model
Sargur Madabushi Srideshikan, Jamison Brooks, Darren Zuro, Bijender Kumar, James Sanchez, Liliana Echavarría Parra, Marvin Orellana, Paresh Vishwasrao, Indu Nair, Junie Chea, Kofi Poku, Nicole Bowles, Aaron Miller, Todd Ebner, Justin Molnar, Joseph Rosenthal, Daniel A. Vallera, Jeffrey Y.C. Wong, Anthony S. Stein, David Colcher, John E. Shively, Paul J. Yazaki, and Susanta K. Hui

TRANSLATIONAL CANCER MECHANISMS AND THERAPY

- 7475** Analysis of Tumor Genomic Pathway Alterations Using Broad-Panel Next-Generation Sequencing in Surgically Resected Lung Adenocarcinoma
Jian Zhou, Francisco Sanchez-Vega, Raul Caso, Kay See Tan, Whitney S. Brandt, Gregory D. Jones, Shi Yan, Prasad S. Adusumilli, Matthew Bott, James Huang, James M. Isbell, Smita Sihag, Daniela Molena, Valerie W. Rusch, Walid K. Chatila, Natasha Rekhman, Fan Yang, Marc Ladanyi, David B. Solit, Michael F. Berger, Nikolaus Schultz, and David R. Jones
See related commentary, p. 7269

- 7485** Early Enrichment of ESR1 Mutations and the Impact on Gene Expression in Presurgical Primary Breast Cancer Treated with Aromatase Inhibitors



Mariana Ferreira Leal, Ben P. Haynes, Eugene Schuster, Belinda Yeo, Maria Afentakis, Lila Zabaglo, Vera Martins, Richard Buus, Andrew Dodson, Maggie C.U. Cheang, Ian E. Smith, Lesley-Ann Martin, and Mitch Dowsett

- 7497** Plasma 25-Hydroxyvitamin D Levels and Survival in Patients with Advanced or Metastatic Colorectal Cancer: Findings from CALGB/SWOG 80405 (Alliance)

Chen Yuan, Kaori Sato, Bruce W. Hollis, Sui Zhang, Donna Niedzwiecki, Fang-Shu Ou, I-Wen Chang, Bert H. O'Neil, Federico Innocenti, Heinz-Josef Lenz, Charles D. Blanke, Richard M. Goldberg, Alan P. Venook, Robert J. Mayer, Charles S. Fuchs, Jeffrey A. Meyerhardt, and Kimmie Ng

- 7506** Multispecific Targeting with Synthetic Ankyrin Repeat Motif Chimeric Antigen Receptors

Ashwini Balakrishnan, Anusha Rajan, Alexander I. Salter, Paula L. Kosasih, Qian Wu, Jenna Voutsinas, Michael C. Jensen, Andreas Plückthun, and Stanley R. Riddell

- 7517** Germline BRCA-Associated Endometrial Carcinoma Is a Distinct Clinicopathologic Entity



Marthe M. de Jonge, Lauren L. Ritterhouse, Cornelis D. de Kroon, Maaïke P.G. Vreeswijk, Jeremy P. Segal, Rutika Puranik; for the HEBON Group, Harry Hollema, Matti A. Rookus, Christi J. van Asperen, Flora E. van Leeuwen, Vincent T.H.B.M. Smit, Brooke E. Howitt, and Tjalling Bosse

- 7527** Purinostat Mesylate Is a Uniquely Potent and Selective Inhibitor of HDACs for the Treatment of BCR-ABL-Induced B-Cell Acute Lymphoblastic Leukemia



Linyu Yang, Qiang Qiu, Minghai Tang, Fang Wang, Yuyao Yi, Dongni Yi, Zhuang Yang, Zejiang Zhu, Shoujun Zheng, Jianhong Yang, Heying Pei, Li Zheng, Yong Chen, Liping Gou, Liya Luo, Xing Deng, Haoyu Ye, Yiguo Hu, Ting Niu, and Lijuan Chen

- 7540** Decreased NOTCH1 Activation Correlates with Response to Ibrutinib in Chronic Lymphocytic Leukemia



Beatrice Del Papa, Stefano Baldoni, Erica Dorillo, Filomena De Falco, Chiara Rompietti, Debora Cecchini, Maria Grazia Cantelmi, Daniele Sorcini, Manuel Nogarotto, Francesco Maria Adamo, Federica Mezzasoma, Estevão Carlos Silva Barcelos, Elisa Albi, Roberta Iacucci Ostini, Ambra Di Tommaso, Andrea Marra, Guido Montanaro, Maria Paola Martelli, Franca Falzetti, Mauro Di Ianni, Emanuela Rosati, and Paolo Sportoletti



Table of Contents

7554 Interleukin-15 Enhances Anti-GD2 Antibody-Mediated Cytotoxicity in an Orthotopic PDX Model of Neuroblastoma

Rosa Nguyen, Ardiana Moustaki, Jacqueline L. Norrie, Shantel Brown, Walter J. Akers, Abbas Shirinifard, and Michael A. Dyer

7565 Combination of PPAR γ Agonist Pioglitazone and Trabectedin Induce Adipocyte Differentiation to Overcome Trabectedin Resistance in Myxoid Liposarcomas

Roberta Frapolli, Ezia Bello, Marianna Ponzo, Ilaria Craparotta, Laura Mannarino, Sara Ballabio, Sergio Marchini, Laura Carrassa, Paolo Ubezio, Luca Porcu, Silvia Brich, Roberta Sanfilippo, Paolo Giovanni Casali, Alessandro Gronchi, Silvana Pilotti, and Maurizio D'Incalci

7576 Triple Therapy with MerTK and PD1 Inhibition Plus Radiotherapy Promotes Abscopal Antitumor Immune Responses

Mauricio S. Caetano, Ahmed I. Younes, Hampartsoum B. Barsoumian, Michael Quigley, Hari Menon, Chan Gao, Thomas Spires, Timothy P. Reilly, Alexandra P. Cadena, Taylor R. Cushman, Jonathan E. Schoenhals, Ailin Li, Quynh-Nhu Nguyen, Maria Angelica Cortez, and James W. Welsh

7585 Correlation of Tumor Burden in Sentinel Lymph Nodes with Tumor Burden in Nonsentinel Lymph Nodes and Survival in Cutaneous Melanoma

Kenjiro Namikawa, Phyu P. Aung, Denái R. Milton, Michael T. Tetzlaff, Carlos A. Torres-Cabala, Jonathan L. Curry, Priyadharsini Nagarajan, Doina Ivan, Merrick Ross, Jeffrey E. Gershenwald, and Victor G. Prieto

7594 Mechanisms and Antitumor Activity of a Binary EGFR/DNA-Targeting Strategy Overcomes Resistance of Glioblastoma Stem Cells to Temozolomide

Zeinab Sharifi, Bassam Abdulkarim, Brian Meehan, Janusz Rak, Paul Daniel, Julie Schmitt, Nidia Lauzon, Kolja Eppert, Heather M. Duncan, Kevin Petrecca, Marie-Christine Guiot, Bertrand Jean-Claude, and Siham Sabri

LETTER TO THE EDITOR

7609 Exercise Window Trial in Newly Diagnosed Breast Cancer—Letter

Andrew H. Sims, Melanie Leggate, and Anna Campbell

CORRECTION

7611 Correction: Novel Oncolytic Adenovirus Selectively Targets Tumor-Associated Polo-Like Kinase 1 and Tumor Cell Viability

Jianfeng Zhou, Qinglei Gao, Gang Chen, Xiaoyuan Huang, Yunping Lu, Kanyan Li, Daxing Xie, Liang Zhuang, Jingniu Deng, and Ding Ma

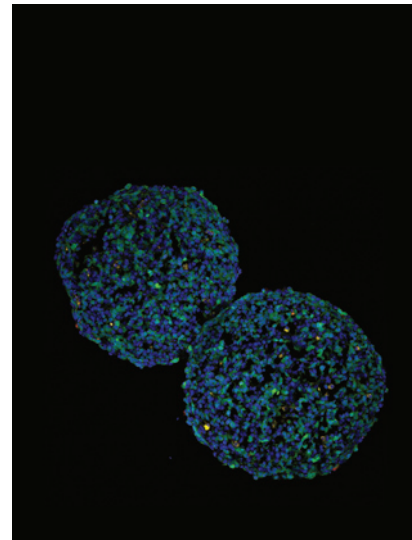
 AC icon indicates AuthorChoice

For more information please visit www.aacrjournals.org

Table of Contents

ABOUT THE COVER

The cover shows a patient-derived neuroblastoma xenograft sphere infiltrated by human IL-15-activated NK cells. For details, see the article by Nguyen and colleagues on page 7554 of this issue.



Clinical Cancer Research

25 (24)

Clin Cancer Res 2019;25:7267-7611.

Updated version Access the most recent version of this article at:
<http://clincancerres.aacrjournals.org/content/25/24>

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/25/24>.
Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.