

CLINICAL CANCER RESEARCH

TABLE OF CONTENTS

HIGHLIGHTS

3267 Selected Articles from This Issue

SPECIAL FEATURES

CCR Translations

3269 **A PERFECT Biomarker-focused Study of Neoadjuvant IO for Esophagogastric Cancer**

Daniel V.T. Catenacci

See related article, p. 3351

3272 **Molecular Subtypes of Pancreatic Cancer: A Proteomics Approach**

Ravi Thakur and Pankaj K. Singh

See related article, p. 3370

3275 **Answers Are in the Blood: cfDNA to Enhance Precision Medicine for Breast Cancer**

Hope S. Rugo and Laura Huppert

See related article, p. 3404

3278 **Can Biomarkers Guide Oncolytic Virus Immunotherapy?**

Howard L. Kaufman

See related article, p. 3432

Reviews

3280 **APOBEC and Cancer Viroimmunotherapy: Thinking the Unthinkable**

Richard G. Vile, Alan Melcher, Hardev Pandha, Kevin J. Harrington, and Jose S. Pulido

3291 **Therapeutic Manipulation of Tumor-associated Macrophages: Facts and Hopes from a Clinical and Translational Perspective**

Paola Allavena, Clément Anfray, Aldo Ummarino, and Fernando Torres Andón

CLINICAL TRIALS: TARGETED THERAPY

3298 **Phase I Study of Zotiraciclib in Combination with Temozolomide for Patients with Recurrent High-grade Astrocytomas**

A C

Jing Wu, Ying Yuan, Debra A. Long Priel, Danielle Fink, Cody J. Peer, Tristan M. Sissung, Yu-Ting Su, Ying Pang, Guangyang Yu, Madison K. Butler, Tito R. Mendoza, Elizabeth Vera, Salman Ahmad, Christine Bryla, Matthew Lindsley, Ewa Grajkowska, Kelly Mentges, Lisa Boris, Ramya Antony, Nancy Garren, Christine Siegel, Nicole Lollo, Christine Cordova, Orwa Aboud, Brett J. Theeler, Eric M. Burton, Marta Penas-Prado, Heather Leeper, Javier Gonzales, Terri S. Armstrong, Katherine R. Calvo, William D. Figg, Douglas B. Kuhns, John I. Gallin, and Mark R. Gilbert

3307 **Selinexor in Combination with R-CHOP for Frontline Treatment of Non-Hodgkin Lymphoma: Results of a Phase I Study**

Erlene K. Seymour, Husain Yar Khan, Yiwei Li, Mahmoud Chaker, Irfana Muqbil, Amro Aboukameel, Radhakrishanan Ramchandren, Christiane Houde, Golbon Sterbis, Jay Yang, Divaya Bhutani, Silvana Pregia, Kathy Reichel, Amy Huddleston, Colleen Neveux, Kelly Corona, Yosef Landesman, Jatin Shah, Michael Kauffman, Sharon Shacham, Ramzi M. Mohammad, Asfar S. Azmi, and Jeffrey A. Zonder

3317 **Angiokines Associated with Targeted Therapy Outcomes in Patients with Non-Clear Cell Renal Cell Carcinoma**

Andrew J. Armstrong, Andrew B. Nixon, Andrea Carmack, Qian Yang, Tim Eisen, Walter M. Stadler, Robert J. Jones, Jorge A. Garcia, Ulka N. Vaishampayan, Joel Picus, Robert E. Hawkins, John D. Hainsworth, Christian K. Kollmannsberger, Theodore F. Logan, Igor Puzanov, Lisa M. Pickering, Christopher W. Ryan, Andrew Protheroe, Daniel J. George, and Susan Halabi

TABLE OF CONTENTS

- 3329** **Sapanisertib Plus Exemestane or Fulvestrant in Women with Hormone Receptor-Positive/HER2-Negative Advanced or Metastatic Breast Cancer**
A C Bora Lim, David A. Potter, Mohamad A. Salkeni, Paula Silverman, Tufia C. Haddad, Frederic Forget, Ahmad Awada, Jean-Luc Canon, Michael Danso, Alain Lortholary, Hugues Bourgeois, Elizabeth Tan-Chiu, Sylvie Vincent, Brittany Bahamon, Kevin J. Galinsky, Chirag Patel, Rachel Neuwirth, E. Jane Leonard, and Jennifer R. Diamond

CLINICAL TRIALS: IMMUNOTHERAPY

- 3339** **Phase I Trial of N-803, an IL15 Receptor Agonist, with Rituximab in Patients with Indolent Non-Hodgkin Lymphoma**
Jennifer A. Foltz, Brian T. Hess, Veronika Bachanova, Nancy L. Bartlett, Melissa M. Berrien-Elliott, Ethan McClain, Michelle Becker-Hapak, Mark Foster, Timothy Schappe, Brad Kahl, Neha Mehta-Shah, Amanda F. Cashen, Nancy D. Marin, Kristen McDaniels, Chaz Moreno, Matthew Mosior, Feng Gao, Obi L. Griffith, Malachi Griffith, Julia A. Wagner, Narendranath Epperla, Amy D. Rock, John Lee, Allegra A. Petti, Patrick Soon-Shiong, and Todd A. Fehniger
- 3351** **Neoadjuvant Chemoradiotherapy Combined with Atezolizumab for Resectable Esophageal Adenocarcinoma: A Single-arm Phase II Feasibility Trial (PERFECT)**
Tom van den Ende, Nicolien C. de Clercq, Mark I. van Berge Henegouwen, Suzanne S. Gisbertz, E.D. Geijsen, R.H.A. Verhoeven, Sybren L. Meijer, Sandor Schokker, M.P.G. Dings, Jacques J.G.H.M. Bergman, Nadia Haj Mohammad, Jelle P. Ruurda, Richard van Hillegersberg, Stella Mook, Max Nieuwdorp, Tanja D. de Gruijl, Tanya T.D. Soeratram, Bauke Ylstra, Nicole C.T. van Grieken, Maarten F. Bijlsma, Maarten C.C.M. Hulshof, and H.W.M. van Laarhoven
See related commentary, p. 3269
- 3360** **Safety and Clinical Activity of Atezolizumab in Patients with Metastatic Castration-Resistant Prostate Cancer: A Phase I Study**
A C Daniel P. Petrylak, Yohann Loriot, David R. Shaffer, Fadi Braiteh, John Powderly, Lauren C. Harshman, Paul Conkling, Jean-Pierre Delord, Michael Gordon, Joseph W. Kim, Indrani Sarkar, Kobe Yuen, Edward E. Kadel III, Sanjeev Mariathasan, Carol O'Hear, Sujata Narayanan, Marcella Fassò, Susheela Carroll, and Thomas Powles

PRECISION MEDICINE AND IMAGING

- 3370** **A Clinically Applicable 24-Protein Model for Classifying Risk Subgroups in Pancreatic Ductal Adenocarcinomas using Multiple Reaction Monitoring-Mass Spectrometry**
Minsoo Son, Hongbeom Kim, Dohyun Han, Yoseop Kim, Iksoo Huh, Youngmin Han, Seung-Mo Hong, Wooil Kwon, Haeryoung Kim, Jin-Young Jang, and Youngsoo Kim
See related commentary, p. 3272
- 3383** **Integrative Genomic Analysis of Gemcitabine Resistance in Pancreatic Cancer by Patient-derived Xenograft Models**
Gang Yang, Wenfang Guan, Zhe Cao, Wenbo Guo, Guangbing Xiong, Fangyu Zhao, Mengyu Feng, Jiangdong Qiu, Yueze Liu, Michael Q. Zhang, Lei You, Taiping Zhang, Yupei Zhao, and Jin Gu
- 3397** **Plasma KIM-1 Is Associated with Recurrence Risk after Nephrectomy for Localized Renal Cell Carcinoma: A Trial of the ECOG-ACRIN Research Group (E2805)**
Wenxin Xu, Māneka Puligandla, Brian Halbert, Naomi B. Haas, Keith T. Flaherty, Robert G. Uzzo, Janice P. Dutcher, Robert S. DiPaola, Venkata Sabbiseti, and Rupal S. Bhatt
- 3404** **Tumor Tissue- versus Plasma-based Genotyping for Selection of Matched Therapy and Impact on Clinical Outcomes in Patients with Metastatic Breast Cancer**
Neelima Vidula, Andrzej Niemierko, Giuliana Malvarosa, Megan Yuen, Jochen Lennerz, A. John Iafrate, Seth A. Wander, Laura Spring, Dejan Juric, Steven Isakoff, Jerry Younger, Beverly Moy, Leif W. Ellisen, and Aditya Bardia
See related commentary, p. 3275
- 3414** **Development and Validation of a Novel Nomogram for Individualized Prediction of Survival in Cancer of Unknown Primary**
A C Kanwal Raghav, Hyunsoo Hwang, Alexandre A. Jácome, Eric Bhang, Anneleis Willett, Ryan W. Huey, Nishat P. Dhillon, Jignesh Modha, Brandon Smaglo, Aurelio Matamoros Jr, Jeannelyn S. Estrella, Justin Jao, Michael J. Overman, Xuemei Wang, F. Anthony Greco, Jonathan M. Loree, and Gauri R. Varadhachary
- 3422** **Artificial Intelligence-Assisted Amphiregulin and Epiregulin IHC Predicts Panitumumab Benefit in RAS Wild-Type Metastatic Colorectal Cancer**
A C Christopher J.M. Williams, Jenny F. Seligmann, Faye Elliott, Michael Shires, Susan D. Richman, Sarah Brown, Liping Zhang, Shalini Singh, Judith Pugh, Xiao-Meng Xu, Andrea Muranyi, Christoph Guetter, Auranuch Lorsakul, Uday Kurkure, Zuo Zhao, Jim Martin, Xingwei Wang, Kien Nguyen, Wen-Wei Liu, Dongyao Yan, Nicholas P. West, Jennifer H. Barrett, Michael Barnes, Isaac Bai, Matthew T. Seymour, Philip Quirke, and Kandavel Shanmugam

TABLE OF CONTENTS

TRANSLATIONAL CANCER MECHANISMS AND THERAPY

- 3432** **Mutations in the IFN γ -JAK-STAT Pathway Causing Resistance to Immune Checkpoint Inhibitors in Melanoma Increase Sensitivity to Oncolytic Virus Treatment**
Tan-Trieu Nguyen, LeeAnn Ramsay, Mozhdeh Ahanfeshar-Adams, Mathieu Lajoie, Dirk Schadendorf, Tommy Alain, and Ian R. Watson
See related commentary, p. 3278
- 3443** **Impact of Baseline and On-Treatment Glycemia on Everolimus-Exemestane Efficacy in Patients with Hormone Receptor-Positive Advanced Breast Cancer (EVERMET)**
Claudio Vernieri, Federico Nichetti, Luca Lalli, Luca Moscetti, Carlo Alberto Giorgi, Gaia Griguolo, Antonio Marra, Giovanni Randon, Carmen G. Rea, Francesca Ligorio, Simone Scagnoli, Claudia De Angelis, Chiara Molinelli, Agnese Fabbri, Emanuela Ferraro, Dario Trapani, Andrea Milani, Elisa Agostinnetto, Ottavia Bernocchi, Giovanna Catania, Amelia Vantaggiato, Michela Palleschi, Anna Moretti, Debora Basile, Marika Cinausero, Arta Ajazi, Lorenzo Castagnoli, Salvatore Lo Vullo, Lorenzo Gerratana, Fabio Puglisi, Nicla La Verde, Grazia Arpino, Andrea Rocca, Mariangela Ciccarese, Rebecca Pedersini, Alessandra Fabi, Daniele Generali, Agnese Losurdo, Filippo Montemurro, Giuseppe Curigliano, Lucia Del Mastro, Andrea Michelotti, Enrico Cortesi, Valentina Guarneri, Giancarlo Pruneri, Luigi Mariani, and Filippo de Braud
- 3456** **Therapeutic Efficacy of Combined JAK1/2, Pan-PIM, and CDK4/6 Inhibition in Myeloproliferative Neoplasms**
Raajit K. Rampal, Maria Pinzon-Ortiz, Amritha Varshini Hanasoge Somasundara, Benjamin Durham, Richard Koche, Barbara Spitzer, Shoron Mowla, Aishwarya Krishnan, Bing Li, Wenbin An, Andriy Derkach, Sean Devlin, Xianhui Rong, Tyler Longmire, Shira Esther Eisman, Keith Cordner, Justin T. Whitfield, Gary Vanasse, Zhu A. Cao, and Ross L. Levine
- 3469** **High PDGFR β Expression Predicts Resistance to Radiotherapy in DCIS within the SwedCIS Randomized Trial**
Carina Strell, Dick Folkvaljon, Erik Holmberg, Aglaia Schiza, Viktoria Thurffjell, Per Karlsson, Jonas Bergh, Troy Bremer, Lars A. Akslen, Fredrik Wärnberg, and Arne Östman
- 3478** **Single-cell Spatial Proteomic Revelations on the Multiparametric MRI Heterogeneity of Clinically Significant Prostate Cancer**
Russell K. Pachynski, Eric H. Kim, Natalia Mihechecheva, Nikita Kotlov, Akshaya Ramachandran, Ekaterina Postovalova, Ilia Galkin, Viktor Svekolkina, Yang Lyu, Qiong Zou, Dengfeng Cao, Joseph Gaut, Joseph E. Ippolito, Alexander Bagaev, Maria Bruttan, Olga Gancharova, Krystle Nornie, Maria Tsiper, Gerald L. Andriole, Ravshan Ataullakhanov, and James J. Hsieh
- 3491** **Next-Generation Sequencing of 487 Esophageal Adenocarcinomas Reveals Independently Prognostic Genomic Driver Alterations and Pathways**
Smita Sihag, Samuel C. Nussenzweig, Henry S. Walch, Meier Hsu, Kay See Tan, Francisco Sanchez-Vega, Walid K. Chatila, Sergio A. De La Torre, Assem Patel, Yelena Y. Janjigian, Steven Maron, Geoffrey Y. Ku, Laura H. Tang, Jaclyn Hechtman, Pari M. Shah, Abraham J. Wu, David R. Jones, Daniela Molena, David B. Solit, Nikolaus Schultz, and Michael F. Berger

OBITUARY

- 3499** **In Memoriam: José Baselga's Journey in Cancer Medicine**
Rakesh Kumar, Gabriel N. Hortobagay, Joan Albanell, Joaquín Arribas, and Larry Norton

CORRECTION

- 3503** **Correction: Angiokines Associated with Outcomes after Sunitinib or Everolimus Treatment in Patients with Non-Clear Cell Renal Cell Carcinoma**
Andrew J. Armstrong, Andrew B. Nixon, Andrea Carmack, Qian Yang, Tim Eisen, Walter M. Stadler, Robert J. Jones, Jorge A. Garcia, Ulka N. Vaishampayan, Joel Picus, Robert E. Hawkins, John D. Hainsworth, Christian K. Kollmannsberger, Theodore F. Logan, Igor Puzanov, Lisa M. Pickering, Christopher W. Ryan, Andrew Protheroe, Daniel J. George, and Susan Halabi

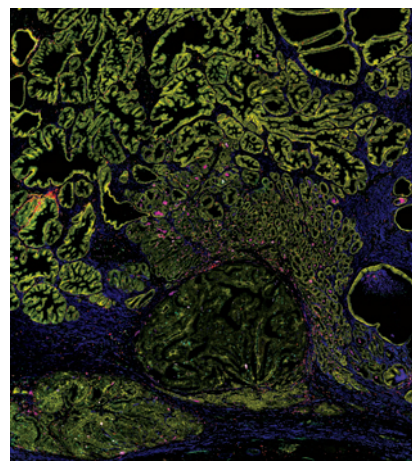
AC AC icon indicates AuthorChoice

For more information please visit www.aacrjournals.org

TABLE OF CONTENTS

ABOUT THE COVER

The cover shows an image of a mpMRI-visible PCa tumor analyzed using AI-driven analysis. This tumor has glandular structures composed of malignant cells that represent stroma and compact tumor architecture. Macrophage infiltration is pronounced in the malignant zones, whereas T-cell infiltration primarily is observed in the nonmalignant compartment. For details, see the article by Pachynski and colleagues on page 3478 of this issue.



Clinical Cancer Research

27 (12)

Clin Cancer Res 2021;27:3267-3503.

Updated version Access the most recent version of this article at:
<http://clincancerres.aacrjournals.org/content/27/12>

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/27/12>.
Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.