

# MOLECULAR CANCER THERAPEUTICS

The Journal of Cancer Drug Discovery & Preclinical Development

AN OFFICIAL JOURNAL OF THE **AACR** American Association  
for Cancer Research



## Editor-in-Chief

Beverly A. Teicher

### Deputy Editors

Yubin Kang  
Akash Patnaik  
Puja Sapra  
Paul Workman

### Reviews Editor

Razelle Kurzrock

### Senior Editors

Timothy P. Cripe  
Susan M. Galbraith  
Iqbal S. Grewal  
Peter J. Houghton  
Candace S. Johnson  
Ricky W. Johnstone  
David G. Kirsch  
John S. Lazo  
Joel Morris  
Brion W. Murray  
Dario Neri  
Seth M. Pollack  
Martine F. Roussel  
Marco Ruella  
Peter Senter  
Louis F. Stancato

### Editorial Staff

#### Managing Editor

Gregory Pavlovcak

#### Associate Editor

Richard W. Davis IV

#### Associate Journal Manager

Crystal Cheepudom

#### Editorial Staff

Nageena Laing

#### Special Content Manager

Chris Vesci

#### Senior Production Editor

Jennifer L. Harper

### Editorial Board

Robert T. Abraham  
Rajesh Agarwal  
Adriana Albini  
Kari Alitalo  
Suresh V. Ambudkar  
Paul A. Andrews  
Avi Ashkenazi  
James E. Audia  
André S. Bachmann  
Raffaele Baffa  
Rebecca G. Bagley  
Albert S. Baldwin, Jr.

David Bearss  
Darell D. Bigner  
Michael L. Bittner  
Thomas F. Bumol  
Robert M. Campbell  
David A. Cheresh  
James G. Christensen  
Steve R. Coats  
Barbara A. Conley  
Robert A. Copeland  
Sayed S. Daoud  
William A. Denny  
Paul Dent  
Channing J. Der  
Vishva M. Dixit  
Ethan Dmitrovsky  
Suzanne A. Eccles  
Heinz-Herbert Fiebig  
William D. Figg, Sr.  
Paul B. Fisher  
Antonio Fojo  
Arthur E. Frankel  
Lori Friedman  
Stephen V. Frye  
Simone Fulda  
Ram N. Ganapathi  
Michelle D. Garrett  
Kathy Gately  
Andreas J. Gescher

(continued on next page)

**Editorial Office:** *Molecular Cancer Therapeutics* [ISSN: 1535-7163 (Print); ISSN: 1538-8514 (Online)] is published monthly, one volume per year, by the American Association for Cancer Research, Inc.; 615 Chestnut Street, 17th Floor, Philadelphia, PA 19106-4404. Periodicals postage paid at Philadelphia, PA, and additional mailing offices. POSTMASTER: Send address changes to *Molecular Cancer Therapeutics*, Member Services, AACR, 615 Chestnut St., 17th Floor, Philadelphia, PA 19106-4404 or E-mail: membership@aacr.org. Copyright 2021 by the American Association for Cancer Research, Inc. © The paper used in this publication meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper).

# MOLECULAR CANCER THERAPEUTICS

## Editorial Board (Continued)

David A. Gewirtz  
Amato J. Giaccia  
William H. Gmeiner  
I. David Goldman  
Michael M. Gottesman  
Paul Grothaus  
Lorraine J. Gudas  
Yusuf A. Hannun  
Stephen B. Howell  
Donna Hurny  
Rakesh K. Jain  
Peter A. Jones  
Craig T. Jordan  
Juliane M. Jürgensmeier  
Robert S. Kerbel  
Andrew S. Kraft  
Donald W. Kufe  
Michihiko Kuwano  
Zihai Li

Mary M. Mader  
Daruka Mahadevan  
Sanjay V. Malhotra  
Sridhar Mani  
Lawrence D. Mayer  
David J. McConkey  
Frank McCormick  
Giovanni Melillo  
Ira Mellman  
Paul S. Mischel  
Brett P. Monia  
Nouri Neamati  
Robert A. Newman  
Barry R. O'Keefe  
Pier Paolo Pandolfi  
Ira Pastan  
Steven R. Patierno  
Maurizio Pellecchia  
Gail D. Lewis Phillips

Andrew Phillips  
Yves Pommier  
C. Patrick Reynolds  
Edward A. Sausville  
Jeffrey Settleman  
Shivendra V. Singh  
David B. Solit  
Michael B. Sporn  
Pavel Strop  
Bin Tean Teh  
Carter Van Waes  
Kristiina Vuori  
Shaomeng Wang  
David J. Waxman  
Tai Wai Wong  
Amy E. Wright  
Jingwu Xie  
Leigh S. Zawel  
Yuesheng Zhang

## Trusted and Timely Publication of Scientific Discoveries

AACR'S ESTEEMED JOURNAL COLLECTION

<b>CANCER DISCOVERY</b> The essential information source to serve the diverse professional community in cancer science and medicine. <b>Impact Factor: 29.497</b>	<b>Cancer Epidemiology, Biomarkers &amp; Prevention</b> Translating science to populations <b>Impact Factor: 4.344</b>	<b>Cancer Immunology Research</b> Illuminating the interplay of cancer and the immune system <b>Impact Factor: 8.728</b>	<b>Cancer Prevention Research</b> The forefront of prevention science <b>Impact Factor: 3.473</b>
<b>Cancer Research</b> The foundational cancer journal driving transformative science <b>Impact Factor: 9.727</b>	<b>Clinical Cancer Research</b> The journal of clinical and translational research <b>Impact Factor: 10.107</b>	<b>Molecular Cancer Research</b> Defining the molecular basis of malignancy and progression <b>Impact Factor: 4.630</b>	<b>Molecular Cancer Therapeutics</b> The journal of cancer drug discovery & preclinical development <b>Impact Factor: 5.615</b>

Subscribe Today!  
[PubSales@AACR.org](mailto:PubSales@AACR.org)

Learn more at [AACRJournals.org](http://AACRJournals.org)

**AACR**

American Association  
for Cancer Research\*

FINDING CURES TOGETHER

## MOLECULAR CANCER THERAPEUTICS

# Publishing Information

AN OFFICIAL JOURNAL OF THE **AACR** American Association  
for Cancer Research

### AACR Officers

David A. Tuveson, President  
Lisa M. Coussens, President-Elect  
Antoni Ribas, Past President  
William N. Hait, Treasurer  
Margaret Foti, Chief Executive  
Officer

### Publications Committee

Victor E. Velculescu, Chairperson  
Adriana Albini  
Laura Fejerman  
Masanori Hatakeyama  
Catriona H.M. Jamieson  
Jos Jonkers  
Virginia G. Kaklamani  
Andrew Kung  
Jonathan D. Licht  
Ira Mellman  
Gordon B. Mills  
Kunle Odunsi  
Kenneth J. Pienta  
Joshua D. Rabinowitz  
Timothy R. Rebbeck  
David L. Rimm  
Mack Roach, III  
Sheila K. Singh  
Sheila A. Stewart  
Miguel A. Villalona-Calero  
Michael B. Yaffe

### Publishing Staff

#### Publisher

Christine Battle

#### Director, Journal

#### Operations and Systems

Daniel S. Evanko

#### Director, Journal Sales and Marketing

Nicola L. Hill

#### Director, Digital Publishing

Mark Jacobson

#### Director, Editorial

Robert Kruger

#### Associate Director, Production

Charlene Squibb

#### Assistant Director, Production

David Livewell

#### Assistant Director, Journal

#### Marketing

Joanna Arnold

#### Assistant Director,

#### Institutional Sales & Outreach

Karola Rac

#### Marketing and Creative Services

#### Senior Director

Paul Driscoll

#### Design Staff

Susan Moore

### Scope

*Molecular Cancer Therapeutics* publishes translational research studies focused on the discovery and preclinical development of therapeutic agents for oncology. To reflect the evolving field of therapeutics, the journal's interest extends to all selective drugs including small molecule inhibitors, antibody-drug conjugates, antibody cytokine fusions, bispecific antibodies, cell therapies, gene therapies, radio-immunotherapeutics, vaccines, viral therapies, and other experimental approaches in oncology.

*Molecular Cancer Therapeutics* is abstracted and/or indexed in Current Contents/Clinical Medicine, MEDLINE, Science Citation Index, Scopus, and Web of Science.

### Submission of Manuscripts

Online manuscript submission is welcomed at <https://mct.msubmit.net>. Before submitting a manuscript, please read the Instructions for Authors, which is available from the Journal's home page at <https://mct.aacrjournals.org>.

### Publication Charges

Articles will be published with the understanding that the author(s) will pay both a publication fee plus a color figure handling fee. Please see the Publication Fees and Reprints page which is available at <https://aacrjournals.org/content/authors/publication-fees-and-reprints>.

### Subscription Information

#### Nonmember Individuals

Subscriptions include online access only. Contacts listed below are for nonmember individual subscriptions.

#### USA and Rest of World (excluding Japan)

American Association for Cancer Research, 615 Chestnut Street, Philadelphia, PA 19106; 1-855-744-4667; [pubsales@aacr.org](mailto:pubsales@aacr.org)

#### Japan

[e-support@maruzen.co.jp](mailto:e-support@maruzen.co.jp);

[journal@kinokuniya.co.jp](mailto:journal@kinokuniya.co.jp); [usaco@usaco.co.jp](mailto:usaco@usaco.co.jp)

International print subscriptions include cost of surface mail. Expedited mailing is available. Contact the American Association for Cancer Research for rates.

#### Site Licenses

For information about institutional site licenses, contact [pubsales@aacr.org](mailto:pubsales@aacr.org).

#### AACR Members

AACR members may opt to receive either a print subscription with online access to content or an online-only subscription. Contact [membership@aacr.org](mailto:membership@aacr.org) or visit the membership page at <https://aacr.org> for more information.

#### Single Issue Sales/Claims

Due to the impact of COVID-19, the AACR has discontinued single issue orders and fulfillment of claims through December 31, 2021.

### Advertising Information

For information about advertising in AACR journals, contact The Walchli Tauber Group, Inc., 2225 Old Emmorton Road, Suite 201, Bel Air, MD 21205; (443) 512-8899; [maura.paoletti@wt-group.com](mailto:maura.paoletti@wt-group.com).

### Copyright and Permissions

Content printed in or disseminated by *Molecular Cancer Therapeutics* is protected by copyright. Authors who wish to publish material in *Molecular Cancer Therapeutics* must formally transfer copyright to the AACR. All authors must sign copyright transfer forms before the AACR can proceed with publication.

To read the complete AACR Copyright and Permissions Policy, visit <https://aacrjournals.org/content/authors/copyright-permissions-and-access>.