

Cancer Prevention Research

The Forefront of Prevention Science

AACR

American Association
for Cancer Research

AN OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH

Editor-in-Chief

Scott M. Lippman

Special Advisors to the Editor-in-Chief

Elizabeth H. Blackburn
Ronald M. Evans
William N. Hait

Deputy Editors

Ernest T. Hawk
Eva Szabo
Timothy C. Wang

Senior Editors

Cory Abate-Shen
Powel H. Brown
Andrew J. Dannenberg
Zigang Dong
Paul F. Engstrom
Jean-Pierre Issa
Thomas W. Kensler
Lawrence J. Marnett
William G. Nelson
Brian J. Reid
David Sidransky
Avrum Spira
Makoto Mark Taketo
Eileen P. White
Ignacio I. Wistuba

Statistical Editor

J. Jack Lee

Editorial Staff

Assistant Managing Editor

Jen Zimmerman

Associate Editor

Leona Flores

Special Content Manager

Chris Vesci

Editorial Associates

Karen Quann
Brittany Rubio

Editorial Board

James L. Abbruzzese	Wendy Demark-Wahnefried	Fadlo R. Khuri	Charles M. Rudin
Lucile L. Adams-Campbell	Phillip A. Dennis	Eric A. Klein	Carmen Sapienza
Rajesh Agarwal	John DiGiovanni	Ah-ng Tony Kong	Dong Moon Shin
David S. Alberts	Ethan Dmitrovsky	Ernst Kuipers	Imad Shureiqi
Garnet L. Anderson	Mitchell Dowsett	Stephen Lam	Yu Shyr
Karen Anderson	Steven M. Dubinett	Ho-Young Lee	Shivendra V. Singh
Michael A. Andrykowski	Adel El-Naggar	Scott J. Leischow	Michael B. Sporn
Leonard H. Augenlicht	Craig A. Elmetts	Christopher I. Li	Sudhir Srivastava
Mariano Barbacid	Isam-Eldin Eltoun	Karen T. Liby	Silvia D. Stan
John A. Baron	Carol J. Fabian	Paul J. Limburg	Vernon E. Steele
Steven A. Belinsky	Olivera J. Finn	Mark W. Lingen	William P. Steward
Raymond C. Bergan	Leslie G. Ford	Steven M. Lipkin	Gary D. Stoner
Diane F. Birt	Wilbur A. Franklin	Karen H. Lu	Henry T. Lynch
Maarten Bosland	Stephen J. Freedland	Henry T. Lynch	Kohta Subbaramaiah
G. Timothy Bowden	Patricia A. Ganz	Carlo C. Maley	Nanjoo Suh
Deborah J. Bowen	Judy E. Garber	Sharon L. Manne	Saraswati Sukumar
Norman F. Boyd	Andreas J. Gescher	Li Mao	Shi-Yong Sun
Douglas E. Brash	Maura L. Gillison	Sanford D. Markowitz	Young-Joon Surh
Otis W. Brawley	Karen Glanz	James R. Marshall	Catherine M. Tangen
Dean E. Brenner	Jeffrey E. Green	Rajendra G. Mehta	Craig B. Thompson
John Burn	Peter Greenwald	Frank L. Meyskens	Henry J. Thompson
Joseph A. Califano	Clinton J. Grubbs	Stefan Michiels	Ian Thompson
Ya Cao	Lorraine J. Gudas	John D. Minna	David Threadgill
Philip E. Castle	J. Silvio Gutkind	James L. Mulshine	Thea D. Tlsty
Andrew T. Chan	Heather Hampel	Kenneth Offit	Asad Umar
Rowan T. Chlebowski	Samir M. Hanash	Olufunmilayo Olopade	Toshikazu Ushijima
Margie L. Clapper	Lynn C. Hartmann	Frank G. Ondrey	Jaye L. Viner
James A. Crowell	Stephen S. Hecht	Vali Papadimitrakopoulou	Kala Visvanathan
Jack Cuzick	James G. Herman	Howard L. Parnes	Victor G. Vogel
Mary B. Daly	Fred R. Hirsch	Electra D. Paskett	Cheryl Lyn Walker
Roderick H. Dashwood	Waun Ki Hong	Richard Peek	Thomas Wang
Nancy E. Davidson	Anthony Howell	John Pepper	Robyn Ward
Andrea De Censi	Chanita Hughes-Halbert	Gloria M. Petersen	Dennis A. Wigle
Silvio De Flora	Stephen D. Hursting	Michael N. Pollak	Benjamin C.Y. Wong
Angelo M. De Marzo	Peter A. Jones	Chinthalapally Rao	Kwok-Kin Wong
	V. Craig Jordan	Rebecca R. Richards-Kortum	Chung S. Yang
	Humam N. Kadara	Daniel W. Rosenberg	Ming You
	Robert L. Keith	Miriam P. Rosin	Harald zur Hausen

Cancer Prevention Research

Publishing Information

AACR
American Association
for Cancer Research

Print ISSN: 1940-6207 • Online ISSN: 1940-6215

AACR Officers

Elizabeth M. Jaffee, President
Elaine R. Mardis,
President-Elect
Michael A. Caligiuri, Past
President
William N. Hait, Treasurer
Margaret Foti, Chief Executive
Officer

Publications Committee

Victor E. Velculescu, Chairperson
Mary Helen Barcellos-Hoff
Alberto Bardelli
Dafna Bar-Sagi
Michael E. Berens
René Bernards
John D. Carpten
Frederic J. de Sauvage
Sanjiv Sam Gambhir
Maura L. Gillison
Rakesh K. Jain
Pasi A. Jänne
Gerrit A. Meijer
Gordon B. Mills
Steffi Oesterreich
William Pao
Gloria M. Petersen
Helen M. Piwnica-Worms
Charles W.M. Roberts
Alice T. Shaw
Lillian L. Siu
David B. Solit
Saraswati V. Sukumar
Toshikazu Ushijima

Publishing Staff

Publisher

Christine B. Rullo

Director, Journal Operations and Systems

Daniel S. Evanko

Director, Journal

Sales and Marketing

Nicola L. Hill

Associate Director, Production

Charlene Squibb

Assistant Director, Journal

Marketing

Joanna Arnold

Assistant Director,

Institutional Sales & Outreach

Karola Rac

Senior Director, Marketing and

Creative Services

Paul Driscoll

Design Staff

Susan Moore

Scope

Cancer Prevention Research is devoted exclusively to cancer prevention. The Journal publishes important original studies, reviews, and commentaries within the major topic areas of biology of premalignancy, risk factors and risk assessment, early detection research, immunoprevention and chemopreventive and other interventions, including the basic science behind them. The Journal includes preclinical, clinical and translational research, with special attention given to molecular discoveries and an emphasis on building a translational bridge between the basic and clinical sciences.

Cancer Prevention Research 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 <http://capr.msubmit.net>. Before submitting a manuscript, please read the Instructions for Authors, which is available from the Journal's home page at <http://cancerpreventionresearch.aacrjournals.org>.

Publication Charges

Beginning with manuscripts submitted January 1, 2016 or after, 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 Instructions for Authors, which are available from the Journal's home page at <http://cancerpreventionresearch.aacrjournals.org>.

Subscription Information

Nonmember Individuals

Subscriptions include print version with online access. 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

Japan

e-support@maruzen.co.jp; journal@kinokuniya.co.jp; 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.

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 or visit the membership page at www.aacr.org for more information.

Single Issue Sales

Subject to their availability, single or back issues may be purchased for \$60 (U.S.) or \$65 (outside the U.S.) each. The cost must be prepaid. Contact pubsales@aacr.org.

Claims

One-time claims for missing issues made within 120 days of the issue's publication will be honored, subject to availability. No credit or refund will be given if an issue is out of print at the time of claim.

AACR Members

membership@aacr.org

Nonmembers and Institutions

pubsales@aacr.org

Advertising Information

For information about advertising in AACR journals, contact Pharmaceutical Media Inc., 30 East 33rd St., 4th Floor, New York, NY 10016; 212-904-0360; Dsimone@pminy.com.

Copyright and Permissions

Content printed in or disseminated by *Cancer Prevention Research* is protected by copyright. Authors who wish to publish material in *Cancer Prevention Research* 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 <http://aacrjournals.org/content/authors/copyright-permissions-and-access>.