Contents

Reviews

Chemoradiotherapy in Cancer Treatment: Rationale and Clinical Applications. K.S. RALLIS, T.H.L. YAU, M. SIDERIS (London, UK) .......................................................................................................................................................... 1

The Prognostic Relevance of Computed Tomography-assessed Skeletal Muscle Index and Skeletal Muscle Radiation Attenuation in Patients With Gynecological Cancer. A. GADUCCI, S. COSIO (Pisa, Italy) ..... 9

Inguinal GIST: A Systematic Literature Review of Primary and Metastatic Cases. E. VIRGILIO, A. ANNICCHIARICO, L. PAGLIAI, A. MORINI, A. ROMBOLI, F. MONTALI, R. COSTI (Parma; Fidenza; L’Aquila, Italy) ................................................................. 21

Experimental Studies


Exome of Radiation-induced Rat Mammary Carcinoma Shows Copy-number Losses and Mutations in Human-relevant Cancer Genes. H. MORIYAMA, K. DAINO, A. ISHIKAWA, T. IMAOKA, M. NISHIMURA, Y. NISHIMURA, M. TAKABATAKE, T. MORIOKA, K. INOUE, M. FUKUSHI, Y. SHIMADA, S. KAKINUMA (Chiba; Tokyo; Aomori, Japan; Washington, DC, USA) ................................................................. 55

Contents continued on the back cover
Editorial Board

P. A. Abrahamsson
Department of Urology, Skåne University Hospital, Lund University, Malmö, Sweden

B. B. Aggarwal
Director, Inflammation Research Center, San Diego, CA, USA

T. Akimoto
Division of Particle Therapy and Department of Radiation Oncology, National Cancer Center East, Kashiwa, Chiba, Japan

P. Z. Anastasiadis
Department of Cancer Biology, Mayo Cancer Center, Jacksonville, FL, USA

A. Argris
Division of Hematology/Oncology, UT Health Science Center at San Antonio, San Antonio, TX, USA

J. P. Armand
Institut Gustave Roussy, Paris, France

V. I. Avramis
Division of Hematology/Oncology, Childrens Hospital, Taichung, Taiwan, ROC

D. T. Bau
Terry Fox Cancer Research Lab, China Medical University Hospital, Taichung, Taiwan, ROC

G. Bauer
Abteilung Virologie, Institut für Medizinische Mikrobiologie und Hygiene, Universität Freiburg, Germany

E. E. Baulieu
INSERM U488 and College de France, Le Kremlin-Bicetre, France

E. J. Benz, Jr.
Dana-Farber Cancer Institute, Boston, MA, USA

J.-Y. Blay
Centre Léon Bérard, Lyon, France

J. Bergh
Department of Clinical and Molecular Medicine, Radiumhemmet, Karolinska Institute, Stockholm, Sweden

F. T. Bosman
Institute of Pathology, University of Lausanne, Switzerland

M. Bouvet
Department of Surgery, University of California San Diego, Moores Cancer Center, La Jolla, CA, USA

J. Boyd
Department of Human and Molecular Genetics, Herbert Wertheim College of Medicine, Florida International University, Miami, FL, USA

G. Broich
Gruppo Policlinico di Monza, Monza, Italy

Ø. S. Bruland
Department of Medical Oncology-Radiotherapy, Norwegian Radium Hospital, Oslo, Norway

J. M. Buatti
Department of Radiation Oncology, University of Iowa, Iowa City, IA, USA

M. Carbone
Cancer Research Center of Hawaii, Honolulu, HI, USA

C. Carlberg
Institute of Biomedicine, University of Eastern Finland, Kuopio, Finland

A. F. Chambers
Department of Oncology, London Regional Cancer Center, London, Ontario, Canada

P. Chandra
Abt. für Molekularbiologie, Klinikum Wolfgang Goethe-Universität, Frankfurt am Main, Germany

L. Cheng
Department of Pathology, Indiana University School of Medicine, Indianapolis, IN, USA

J.-G. Chung
Department of Biological Science and Technology, China Medical University, Taichung, Taiwan, ROC

R. Clarke
Georgetown University Medical Center, Washington, DC, USA

A. P. Conley
Department of Sarcoma Medical Oncology, University of Texas MD Anderson Cancer Center, Houston, TX, USA

E. De Clercq
Rega Institute for Medical Research, Katholieke Universiteit Leuven, Belgium

W. Den Otter
VUMC, Department of Urology, Amsterdam, The Netherlands

E. P. Diamandis
Department of Pathology and Laboratory Medicine, Mount Sinai Hospital, Toronto, Ontario, Canada

G. Th. Diamandopoulos
Department of Pathology, Harvard Medical School, Boston, MA, USA

L. Egevad
Department of Pathology, Karolinska University Hospital, Stockholm, Sweden

D. W. Felsher
Division of Oncology, Stanford University School of Medicine, Stanford, CA, USA

J. A. Fernandez-Pol
Metalloproteomics, LLC, Chesterfield, MO, USA

H. Fu
Discovery and Developmental Therapeutics Program of Winship Cancer Institute, Emory University, Atlanta, GA, USA

B. Fuchs
Balgrist University Hospital, Zurich, Switzerland

D. Fuchs
Center for Chemistry and Biomedicine, Innsbruck Medical University, Innsbruck, Austria

D. Fukumura
Edwin L. Steele Laboratories, Department of Radiation Oncology, Harvard Medical School, Boston, MA, USA

G. Gabbiani
Department of Pathology, University of Geneva, Switzerland

R. Ganapathi
Levine Cancer Institute, Carolinas HealthCare System, Charlotte, NC, USA

continued
A. Giordano  
Sbarro Institute for Cancer Research, Temple University, Philadelphia, PA, USA

M. Gnant  
Department of Surgery, Medical University of Vienna, Austria

R. H. Goldfarb  
R. H. Goldfarb Sopherion Therapeutics, LLC and Translational Oncology and ImmunoEngineering Consulting, Guilford, CT, USA

J.S. Greenberger  
Department of Radiation Oncology, University of Pittsburgh, Pittsburgh, PA, USA

A. Helland  
Oslo University Hospital-Radium Hospital, Oslo, Norway

L. Helson  
Sign Path Pharma, Inc., Quakertown, PA, USA

R. Henriksson  
Department of Experimental Oncology, Umeå University, Umeå, Sweden

R. M. Hoffman  
Department of Surgery, University of California, San Diego, CA, USA

P. Hohenberger  
Division of Surgical Oncology and Thoracic Surgery, Medical Faculty, University of Heidelberg, Mannheim, Germany

F. Janku  
Department of Investigational Cancer Therapeutics, University of Texas MD Anderson Cancer Center, Houston, TX, USA

S. C. Jhanwar  
Laboratory of Solid Tumor Genetics, Department of Medicine, Memorial Sloan-Kettering Cancer Center, New York, NY, USA

J. V. Johannessen  
Department of Pathology, The Norwegian Radium Hospital, Oslo, Norway

R. Jones  
Sarcoma Unit, Royal Marsden Hospital, London, UK

B. Kaina  
Institute of Toxicology, University of Mainz, Germany

P.-L. Kellokumpu-Lehtinen  
Department of Oncology and Radiotherapy, Tampere University Hospital, Tampere, Finland

D. G. Kieback  
Helios Medical Center Schleswig, Schleswig, Germany

R. Klapdor  
Medical Clinic, University of Hamburg, Germany

K.L. Knutson  
Department of Immunology, Mayo Clinic College of Medicine, Jacksonville, FL, USA

H. Kobayashi  
Laboratory of Molecular Theranostics, NCI/NIH, Bethesda, MD, USA

S. D. Kottaridis  
Department of Virology, Hellenic Anticancer Institute, Athens, Greece

G. R. F. Krueger  
Center of Anatomy II, University of Cologne Medical School, Cologne, Germany

Pat M. Kumar  
Department of Biological Sciences, Manchester Metropolitan University, Manchester, UK

Shant Kumar  
Department Pathology, University of Manchester Medical School, Manchester, UK

O. D. Laerum  
Department of Pathology, The Gade Institute, University of Bergen, Norway

F. J. Lejeune  
Fondation du Centre Pluridisciplinaire d’Oncologie, CHUV, Lausanne, Switzerland

S. Linder  
Department of Medicine and Health, Linköping University, Linköping, Sweden

L. F. Liu  
Department of Pharmacology, UMD of New Jersey, Piscataway, NJ, USA

D. M. Lopez  
Department of Microbiology and Immunology, University of Miami School of Medicine, Miami, FL, USA

E. Lundgren  
Unit of Applied Cell and Molecular Biology, University of Umeå, Sweden

Y. Maehara  
Department of Surgery and Science, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan

J. Maher  
Department of Research Oncology, Division of Cancer Studies, King’s College London School of Medicine, Guy’s Hospital Campus, London, UK

J. Marescaux  
IRCAD, University of Strasbourg, France

S. S. Martin  
Department of Physiology, University of Maryland School of Medicine, Baltimore, MD, USA

S. Mitra  
The Methodist Hospital Research Institute (TMHRI), Houston, TX, USA

S. Miyamoto  
Department of Obstetrics and Gynecology, Faculty of Medicine, Fukuoka University, Fukuoka, Japan

S. Moncada  
Manchester Cancer Research Centre, University of Manchester, Manchester, UK

M. Mueller  
Hochschule Furtwangen University, Villingen-Schwenningen, Germany

F. M. Muggia  
New York University Cancer Institute, School of Medicine, NY, USA

continued
Acknowledgements

The IIAR appreciates the support of the following Foundations, Institutions, Organizations and Universities for the works published in Anticancer Research, Volume 40, 2020.

AbbVie Pharmaceuticals, Lake Bluff, IL, U.S.A.
Academy of Finland, Helsinki, Finland
AceStatistics Support Co, Ltd., Essex, U.K.
Advanced Intelligence Project (AIP) - Public/Private R&D Investment Strategic Expansion Program (PRISM), Japan
Science and Technology Agency (JST), Kawaguchi, Japan
Advanced Light Microscopy Facility, University of Patras, Patras, Greece
Advanced Research Foundation, U.S.A.
Agency for Medical Research, Ministry of Health of the Czech Republic, Czech Republic
Agioi Anargyroi General Hospital, Athens, Greece
Ajmera Family Chair in Urologic Oncology, Sunnybrook Hospital, Toronto, ON, Canada
All Children’s Hospital Foundation, St Petersburg, FL, U.S.A.
American Cancer Society, Atlanta, GA, U.S.A.
American College of Surgeons, Committee on Cancer (CoC), Chicago, IL, U.S.A.
American Medical Association, Chicago, IL, U.S.A.
An Nan Hospital, China Medical University, Tainan, Taiwan, R.O.C.
Analytic Healthcare Quality User Information Program of the National Research, Development and Innovation Fund, Hungarian Government, Hungary
Animal Biotechnology Center, Feature Areas Research Center Program, Higher Education Sprout Project, Ministry of Education in Taiwan, Taiwan, R.O.C.
Applied Medical Research Laboratory, Japan
ARC Foundation, Vancouver, BC, Canada
Archie and Betty McCallum, U.S.A.
Armauer Hansen Research Institute, Addis Ababa, Ethiopia
Asan Institute for Life Sciences, Asan Medical Center, Seoul, Republic of Korea
ASCO Gastrointestinal Cancers Symposium, San Francisco, CA, U.S.A.
Asia University, Taichung, Taiwan, R.O.C.
Asociación Costarricense de Oncología Médicos (ACOMED), San José, Costa Rica
Association of Healthcare Corporation, Japan
Associazione Italiana per la Ricerca sul Cancro (AIRC), Milan, Italy
Ateneo Sapienza University, Rome, Italy
Augusta University Georgia Cancer Center, Augusta, GA, U.S.A.
Basic Science Research Program, National Research Foundation of Korea (NRF), Ministry of Education, Science and Technology, Seoul, Republic of Korea
BBMRI-CZ, Bank of Clinical Specimens Focused on Cancer, Brno, Czech Republic
Berlin Air Quality Network, Berlin, Germany
Berlin Institute of Health, Berlin, Germany
Bethel University, Saint Paul, MN, U.S.A.
Biobank of Kaohsiung Veterans General Hospital, Kaohsiung City, Taiwan, R.O.C.
Biobank of the Center for Integrated Oncology Cologne Bonn, University Hospital Bonn, Bonn, Germany
Biohit Oyj, Helsinki, Finland
Biomedical Research Institute Grant, Kyungpook National University Hospital, Daegu, Republic of Korea
Biomedical Research Institute, Gyeongsang National University Hospital, Jinju, Republic of Korea
Bio-oriented Technology Research Advancement Institution (BRAIN), National Agriculture and Food Research Organization (NARO), Japan
Biophotonics Laboratory, Centro de Biotecnologia (CBIotec), Universidade Federal da Paraíba (UFPB), Brazil
Biosignal Research Center, Kobe University, Kobe, Japan
Bonati Research Stipend, U.S.A.
Boston Medical Center Plastic Surgery Department, Boston, MA, U.S.A.
Canadian Breast Cancer Foundation Endowed Chair in Breast Cancer Research, Canada
Canadian Cancer Society, Toronto, ON, Canada
Canadian Institutes of Health Research, Ottawa, ON, Canada
Canadian Tumour Repository Network (CTRNet), Canada
Cancer Association of South Africa (CANSa), South Africa
Cancer Center Amsterdam, Amsterdam, the Netherlands
Cancer Center, Buddhist Tzu Chi General Hospital, Hualien City, Taiwan, R.O.C.
Deanship of Scientific Research (DSR), King Abdulaziz University, Jeddah, Saudi Arabia
DEKART Proteomics Laboratory, Kocaeli University Medical School, Kocaeli, Turkey
Department of Biostatistics, Catholic Research Coordinating Center, The Catholic University of Korea, Daejeon, Republic of Korea
Department of Biostatistics, Yokohama City University School of Medicine, Yokohama, Japan
Department of Breast and Endocrine Surgery, Osaka City University Graduate School of Medicine, Osaka, Japan
Department of Chemistry, Howard University, Washington, DC, U.S.A.
Department of Clinical and Translational Physiology, Kyoto Pharmaceutical University, Kyoto, Japan
Department of Clinical Oncology, Kyoto Pharmaceutical University, Kyoto, Japan
Department of Clinical Statistics, Graduate School of Medicine, Yokohama City University, Yokohama, Japan
Department of Education Title III Program, Clark Atlanta University, Atlanta, GA, U.S.A.
Department of Environmental Medicine, Kurume University School of Medicine, Kurume, Japan
Department of Experimental, Diagnostic and Speciality Medicine (DIMES), S. Orsola-Malpighi University Hospital, Bologna, Italy
Department of Gastroenterological Surgery, Osaka University Graduate School of Medicine, Osaka, Japan
Department of Gastroenterology and Hepatology, Nagoya University Graduate School of Medicine, Nagoya, Japan
Department of General Thoracic Surgery and Breast and Endocrinological Surgery, Okayama, Japan
Department of Histology and Embryology, Lithuanian University of Health Sciences, Kaunas, Lithuania
Department of Integrated Diagnostic Pathology, Nippon Medical School, Tokyo, Japan
Department of Internal Medicine – Oncology, General Hospital of Thessaloniki Papageorgiou, Thessaloniki, Greece
Department of International Medical Communications, Tokyo Medical University, Tokyo, Japan
Department of Medical Research, China Medical University Hospital, Taichung, Taiwan, R.O.C.
Department of Medicine Clinic III, Hematology, Oncology and Palliative Medicine, Rostock University Medical Center, Rostock, Germany
Department of Neuroscience, Imaging and Clinical Sciences, “G. D’Annunzio” University of Chieti, Chieti, Italy
Department of Next Generation Cell and Immune Therapy, Juntendo University School of Medicine, Tokyo, Japan
Department of Oncology, University Hospital of Lausanne–CHUV, Lausanne, Switzerland
Department of Otorhinolaryngology Head and Neck Surgery, University Hospital Mannheim, University of Heidelberg, Mannheim, Germany
Department of Pathology and Laboratory Medicine, Nagoya University of Hospital, Nagoya, Japan
Department of Pathology, Kanagawa Cancer Center, Yokohama, Japan
Department of Pathology, Kangbuk Samsung Hospital, Seoul, Republic of Korea
Department of Pathology, Medical School, University of Athens, Athens, Greece
Department of Pathology, Nagasaki University Hospital, Nagasaki, Japan
Department of Pathology, Osaka University Hospital, Osaka, Japan
Department of Pathology, Saitama Medical University International Medical Center, Saitama, Japan
Department of Pathology, School of Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece
Department of Pediatrics, University of California San Diego School of Medicine, San Diego, CA, U.S.A.
Department of Pharmacology and Therapeutics, Faculty of Pharmacy, Kuwait University, Kuwait City, Kuwait
Department of Physiology, School of Medicine, Autonomous National University of Mexico (UNAM), Mexico City, Mexico
Department of Preventive Medicine, Tokai University School of Medicine, Hiratsuka, Japan
Department of Radiation Oncology, Gunma University Graduate School of Medicine, Maebashi, Japan
Department of Radiation Oncology, Osaka International Cancer Institute, Osaka, Japan
Department of Radiation Oncology, Stanford University School of Medicine, California, CA, U.S.A.
Department of Radiotherapy, Yamaguchi University Graduate School of Medicine, Ube, Japan
Department of Surgery, International University of Health and Welfare Hospital, OtaWara, Japan
Department of Surgery, University of Pécs Medical School, Pécs, Hungary
Department of Urology, Arad Hospital, Tehran, Iran
Department of Urology, Kyoto Prefectural University of Medicine, Kyoto, Japan
Departments of Medicine and Radiation Oncology, Rutgers New Jersey Medical School, Newark, NJ, U.S.A.
Departments of Pathology and Thoracic Surgery, Kanazawa Medical University, Uchinada, Japan
Departments of Surgery and Pharmacology and Physiology, Drexel University College of Medicine, Philadelphia, PA, U.S.A.
Development of Characteristic Education Grant, Japan Private School Promotion Foundation, Japan
Ditmanson Medical Foundation, Chiayi Christian Hospital, Chiayi, Taiwan, R.O.C.
Division of Oncology, Department of Medicine, University General Hospital, Patras, Greece
Dutch Cancer Society, Amsterdam, the Netherlands

E-Da Cancer Hospital, Kaohsiung, Taiwan, R.O.C.
EDGC, Inc., Incheon, Republic of Korea
Edmond Odette Foundation, Toronto, ON, Canada
Engdahl Family Foundation, Anoka, MN, U.S.A.
Engineering Division, Hospital de Clínicas de Porto Alegre (HCPA), Porto Alegre, RS, Brazil
Epidemiological Strategy and Medical Economics (ESME) Scientific Committee, Erasmus University Rotterdam, Rotterdam, the Netherlands
Estímulo alDesempeño de los Investigadores (EDI) of IPN, Paris, France
Ethicon Endosurgery, Cincinnati, OH, U.S.A.
Ethiopian Airlines Health Office, Addis Ababa, Ethiopia
European MRI and Rectal Cancer Surgery (EuMaRCS) Study Group
European Regional Development Fund (ERDF), Brussels, Belgium
European Research Council
European Social Fund, Brussels, Belgium
European Union’s Seventh Framework Program
EVO-funding, Kuopio University Hospital, Kuopio, Finland
Excellence Program, State of Mecklenburg-Vorpommern, Germany
Experimental, Educational and Research Center ELPEN, Greece
Faculty of Dentistry, Thammasat University, Bangkok, Thailand
Faculty of Medicine, University of Porto, Porto, Portugal
Faculty of Pharmaceutical Sciences, Chulalongkorn University, Bangkok, Thailand
Far Eastern Memorial Hospital, New Taipei, Taiwan, R.O.C.
Federal Ministry of Science, Research and Economy (BMWF), Vienna, Austria

Federal Ministry of Transport, Innovation and Technology (BMVIT), Vienna, Austria
Federal University of Rio Grande do Sul, Porto Alegre, Brazil
Financiadora de Estudos e Projetos (FINEP), Brazil
First Faculty of Medicine, Charles University in Prague, Prague, Czech Republic
Fondation du Cancer du Sein du Québec, Montreal, Canada
Fondazione Cassa di Risparmio di Perugia, Perugia, Italy
Fondazione Roma, Rome, Italy
Fonds de Recherche du Québec - Santé (FRQS), Montreal, Canada
Foundation for the Promotion of Cancer Research, Japan
Foundation of Osaka Cancer Research, Osaka, Japan
Friedrich-Alexander-University Erlangen-Nuremberg (FAU), Erlangen, Germany
Fukuoka Foundation for Sound Health Cancer Research Fund, Japan
Fukuoka Wajiro Hospital, Fukuoka, Japan
Fulbright Program, U.S.A.
Fundaçao de Amparo à Pesquisa do Estado do Piauí (FAPEPI), Brazil
Fundaçao de Amparo à Pesquisa do Estado do Rio de Janeiro (FAPERJ), Brazil
Fundaçao de Amparo à Pesquisa do Estado do Rio Grande do Sul (FAPERGS), Brazil
Fundaçao de Apoio à Pesquisa do Estado da Paraíba (FAPESQ-PB), Brazil
Fundação para a Ciência e a Tecnologia (FCT), Ministério da Ciência e Ensino Superior, Portugal
Fundo Europeu de Desenvolvimento Regional (FEDER), Lisbon, Portugal
Gachon University, Incheon, Republic of Korea
General Hospital of Heraklion Pananio-Venizelio, Heraklion, Greece
General University Hospital in Prague, Prague, Czech Republic
Georgia Research Alliance (GRA) Venture Lab Grant, U.S.A.
German Cancer Research Center (DKFZ), Heidelberg, Germany
German Federal Ministry of Education and Research (BMBF), Germany
Gil Medical Center, Gachon University, Incheon, Republic of Korea
GINECO Study Office
GlaxoSmithKline plc, London, U.K.
Global Robotics Institute, Florida Hospital, Orlando, FL, U.S.A.
Graduate Research Group of the Hospital de Clínicas de Porto Alegre (GPPG), Porto Alegre, Brazil
Graduate School of Pharmaceutical Sciences, Osaka University, Osaka, Japan
Graduate School, Chulalongkorn University, Bangkok, Thailand
Graduate School, Khon Kaen University, Khon Kaen, Thailand
Grand Forks Human Nutrition Research Center, Washington, DC, U.S.A.
Grant-in-Aid for Scientific Research, Ministry of Health, Labor and Welfare, Tokyo, Japan
Grants-in-Aid for Scientific Research (KAKENHI), Japan Society for the Promotion of Science, Tokyo, Japan
Greek National Funds, Athens, Greece
Grigore T. Popa University of Medicine and Pharmacy, Iasi, Romania
Grünenthal Foundation, Portugal
GSTU Foundation, Palermo, Italy
Gunma University Heavy-Ion Medical Center, Gunma, Japan
Gunma University Hospital, Gunma, Japan
Gyeongsang National University Hospital Biomedical Research Institute, Jinju, Republic of Korea
Hadassah Braun School of Public Health, Hebrew University, Jerusalem, Israel
Hallym University Research Fund, Chuncheon, Republic of Korea
Harasanshin Hospital, Fukuoka, Japan
Heikki, Aino and Aarne Korhonen Foundation, Finland
Hellenic Society of Medical Oncology (HeSMO), Athens, Greece
Helsinki University Central Hospital Research Foundation, Helsinki, Finland
Heuermann HF Technik, Aachen, Germany
Higashiosaka City Medical Center, Osaka, Japan
High Throughput Biomedicine Unit (HTB), Institute for Molecular Medicine Finland (FIMM), Finland
Hiroshima Red Cross Hospital and Atomic-bomb Survivors Hospital, Hiroshima, Japan
Hôpital Privé DrômeArdèche - Clinique Pasteur, Guilleren-Granges, France
Hôpital Privé Sainte-Marie, Chalon-sur-Saône, France
Hospital Bichat, Paris, France
Howard University, Washington, D.C., U.S.A.
Human Genome Center, Japan

Hyogo Prefectural Amagasaki General Medical Center, Hyogo, Japan
Icahn School of Medicine at Mount Sinai, New York, NY, U.S.A.
Ichiro Kaniehara Foundation, Promotion of Medical Science and Medical Care, Japan
IC-MedTech Co., San Diego, CA, U.S.A.
lizuka Hospital, Fukuoka, Japan
Inje University Busan Paik Hospital, Busan, Republic of Korea
Innovative Medicines Initiative, Brussels, Belgium
Institut Jean Godinot, Reims, France
Institute for Experimental Surgery, University of Rostock, Rostock, Germany
Institute of Biomathematics, University Hospital Mannheim, University of Heidelberg, Mannheim, Germany
Institute of Cytology and Genetics, Novosibirsk, Russia
Institute of Medical Biochemistry and Laboratory Diagnostics, First Faculty of Medicine, Charles University, Prague, Czech Republic
Institute of Medical Biometry and Statistics, University of Freiburg, Freiburg im Breisgau, Germany
Institute of Medical Science, The University of Tokyo, Tokyo, Japan
Institute of Molecular and Cellular Biology, Novosibirsk, Russia
Instituto de Pesquisa em Fármacos e Medicamentos (IPeFarM), Universidade Federal da Paraíba (UFPB), Brazil
Intégrale Co., Ltd., Tokushima, Japan
International Research Network, Thailand Research Fund (TRF), Thailand
Interreg Deutschland-Danmark, Kiel, Germany
Intramural Funding of the School of Medicine and Health Sciences, University of Oldenburg, Oldenburg, Germany
Intramural Research Program, National Cancer Institute, National Institutes of Health, Department of Health and Human Services, Bethesda, MD, U.S.A.
Inui Immunotherapy Clinic, Osaka, Japan
Iran National Scientific Foundation (INSF), Iran
I-Shou University, Kaohsiung, Taiwan, R.O.C.
Italian Association of Radiation Oncology (AIRO) Group for Gastrointestinal Cancer, Italy
Italian Ministry of Health, Italy
Jane and Aatos Erkko Foundation, Finland
Japan Agency for Medical Research and Development (AMED), Tokyo, Japan
Medical University of Bialystok, Bialystok, Poland
Medical University of Gdansk, Gdansk, Poland
Medical University of Lublin, Lublin, Poland
Medical University Science Park in Košice, Slovakia
Medicinal Plants Research Center (NPPM), Federal University of Piauí, Teresina, Brazil
Merck Serono S.A., Darmstadt, Germany
Middle Tennessee State University, Murfreesboro, TN, U.S.A.
Minerva Foundation, Finland
Ministério da Ciência e Tecnologia (MCT), Brazil
Ministry of Education and Science of the Russian Federation
Ministry of Education, Culture, Sports, Science and Technology (MEXT), Tokyo, Japan
Ministry of Education, Youth and Sports of the Czech Republic
Ministry of Health and Welfare, Taiwan, R.O.C.
Ministry of Health of the Czech Republic
Ministry of Innovation and Technology, Hungary
Ministry of Science and Technology, Taiwan, R.O.C.
Ministry of Science, ICT & Future Planning (MSIP), Republic of Korea
Minor Equipment Grant WHC Dividend, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa
Miyazaki Prefectural Miyazaki Hospital, Miyazaki, Japan
Nagasaki University Hospital, Nagasaki, Japan
Nanjing Medical Science and Technology Development Foundation, P.R. China
National Cancer Institute (NCI), National Institutes of Health, Department of Health and Human Services, Bethesda, MD, U.S.A.
National Cancer Research Institute, Tokyo, Japan
National Center for Advancing Translational Sciences (NCATS), National Institutes of Health, Department of Health and Human Services, Bethesda, MD, U.S.A.
National Center for Research and Development, Warsaw, Poland
National Centre for Research and Development Strategmed, Poland
National Clinician Scholars Program, Duke University, Durham, NC, U.S.A.
National Health and Medical Research Council of Australia
National Health Research Institute, Taiwan, R.O.C.
National Hospital Organization Osaka National Hospital, Osaka, Japan
National Institute for General Medical Science (NIGMS), National Institutes of Health (NIH), Department of Health and Human Services, Bethesda, MD, U.S.A.
National Institute of Minority Health and Health Disparities (NIMHD), NIH, Bethesda, MD, U.S.A.
National Institute of Nursing Research, National Institutes of Health (NIH), Bethesda, MD, U.S.A.
National Institutes of Health (NIH), Department of Health and Human Services, Bethesda, MD, U.S.A.
National Natural Science Foundation of China
National Research Foundation (NRF)-Thuthuka Grant, Pretoria, South Africa
National Science Centre Grant Opus, Poland
Natural Science Foundation of Guangxi, P.R. China
Novartis International AG, Basel, Switzerland
Novartis Oncology (Hellas), Athens, Greece
Novartis Pharma GmbH, Nuremberg, Germany
Ogata Foundation, Japan
Ohio State University College of Pharmacy, Columbus, OH, U.S.A.
OHSU Knight BioLibrary, Portland, OR, U.S.A.
OHSU Knight Diagnostic Laboratories, Portland, OR, U.S.A.
Oita Cancer Research Foundation, Oita, Japan
Oita Red Cross Hospital, Oita, Japan
Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan
Onassis Foundation, Athens, Greece
Oncodesign, France
Oncology Department, University of Oxford, Oxford, U.K.
Oncoalyze Inc., New York, NY, U.S.A.
Ono pharmaceutical Co., Ltd, Osaka, Japan
Opal Oncology Ltd., Cambridge, U.K.
Operational Programme “Innovative Economy”, European Regional Development Fund (ERDF), European Union
Operational Programme Competitiveness, Entrepreneurship and Innovation (EPAnEK), European Union
Operational Programme Research, Development and Education (OP RDE), European Union
Organic Synthesis Shared Resource, Penn State Cancer Institute, Hershey, PA, U.S.A.
Osaka City University Graduate School of Medicine, Osaka, Japan
Osaka City University Hospital, Osaka, Japan
Osaka General Medical Center, Osaka, Japan
Oulu University Hospital MRC Grant, Oulu, Finland
Päivikki ja Sakari Sohlberg Foundation, Helsinki, Finland
Palacky University Olomouc, Olomouc, Czech Republic
Penn State Hershey Milton S. Hershey Medical Center, Hershey, PA, U.S.A.
Pharma Crea Kobe Co.Ltd., Kobe, Japan
PharmaMar, Colmenar Viejo, Spain
Picower Institute, Massachusetts Institute of Technology, Cambridge, MA, U.S.A.
Plastic Surgery Foundation, Arlington Heights, IL, U.S.A.
Polish Adult Leukemia Group (PALG), Poland
Polish Ministry of Science and Higher Education
Polish National Science Center
Polka Dot Mama Melanoma Foundation, Cary, NC, U.S.A.
PRIORITY Issue on Post-K Computer, Tokyo, Japan
Programa de Apoio a Núcleos Emergentes (PRONEM), Brazil
Programa Institucional de Formación de Investigadores del IPN (PIFI), Mexico
Programa Operacional Capital Humano (POCH), Portugal
Project for Cancer Research and Therapeutic Evolution (P-CREATE), Japan Agency for Medical Research and Development (AMED), Tokyo, Japan
Pró-Saúde Associação Beneficente de AssistênciaSocial e Hospitalar, Brazil
Public Trust Surgery Research Fund, Japan
QST Hospital, Chiba, Japan
Quantum and Radiological Science and Technology (QST), National Institute of Radiological Sciences (NIRS), Chiba, Japan
Radiumhospitalets Legater, Oslo, Norway
Ratchadaphiseksomphot Fund, Chulalongkorn University, Bangkok, Thailand
RayVio Corp., Hayward, CA, U.S.A.
Research Administration, Kuwait University Research Grant, Kuwait City, Kuwait
Research Center for Molecular Medicine, Analysis Center of Life Science, Faculty of Medicine, Hiroshima University, Hiroshima, Japan
Research Fund of Istanbul University, Istanbul, Turkey
Research Fund of the Department of Medical Research, China Medical University Hospital, Taichung, Taiwan, R.O.C.
Research Fund of Tung’s Taichung Metro Harbor Hospital, Taichung, Taiwan, R.O.C.
Research in Design for Discovery Within Learning Environments (RIDDLE Lab), New York, NY, U.S.A.
Research Incentive Fund, Fundo de Incentivo à Pesquisa e Eventos (FIPE), Hospital de Clínicas de Porto Alegre (HCPA), Porto Alegre, Brazil
Research Institute for Convergence of Biomedical Science and Technology Grant, Pusan National University Yangsan Hospital, Yangsan, Republic of Korea
Research Instrument Center, Khon Kaen University, Khon Kaen, Thailand
Research Project with Heavy Ions, National Institute of Radiological Sciences, Technology of Japan, Chiba, Japan
Research Resettlement Fund, Seoul National University, Seoul, Republic of Korea
Research Support Center, Kyushu University Graduate School of Medical Sciences, Fukuoka, Japan
Réseau de recherche sur le cancer, Canada
Roche S.A.S., Paris, France
Roswell Country Club Prostate Cancer Research Award, Winship Cancer Institute, Emory University, Atlanta, GA, U.S.A.
Roswell Park Cancer Institute, Buffalo, NY, U.S.A.
Royal Society, Bangkok, Thailand
Russian Ministry of Science and High Education
Ryukyu Society for the Promotion of Oto-Rhino-Laryngology, Japan
S&P GmbH, Augsburg, Germany
Sagara Hospital, Alappuzha, India
Saudi Arabian Ministry of Education
Science Achievement Scholarship, Thailand
Science of Health Care Delivery, Robert D. and Patricia E. Kern Center, Rochester, MN, U.S.A.
Scientific Cancer Cell Biology Group, Wroclaw Medical University, Wroclaw, Poland
Screening Laboratory of Biological Activity Test and Collection of Biological Material, Faculty of Pharmacy, Division of Laboratory Diagnostics, Wroclaw Medical University, Wroclaw, Poland
Senior Research Scholar Grant, Thailand Research Fund, Bangkok, Thailand
Seoul National University Hospital (SNUH) Research Fund, Seoul, Republic of Korea
SGH Foundation, Japan
University of Adelaide, Adelaide, Australia
University of Alabama at Birmingham (UAB) Flow Cytometry Core, Birmingham, AL, U.S.A.
University of Pecs, Pecs, Hungary
University of South Florida (USF) Research Computing, Tampa, FL, U.S.A.
University of the Witwatersrand, Johannesburg, South Africa
University of Tokushima Graduate School, Tokushima, Japan
University of Tokyo, Tokyo, Japan
University of Tsukuba, Tsukuba, Japan
UNT Health Science Center (UNTHSC), Fort Worth, TX, U.S.A.
URC Grant, University Research Committee, University of the Witwatersrand, Johannesburg, South Africa
Veterans Administration Merit Awards, Washington, DC, U.S.A.
Vienna Business Agency, Vienna, Austria
Wake Forest University, Winston-Salem, NC, U.S.A.
Walailak University, Nakhon Si Thammarat, Thailand
Western University of Health Sciences, Pomona, CA, U.S.A.
Wilhelm-Sander Foundation, Munich, Germany
Wrocław Centre of Biotechnology, Wrocław, Poland
Wrocław Medical University, Wrocław, Poland
Yamaga City Medical Center, Yamaga, Japan
Yamaguchi Rosai Hospital, Sanyo-Onoda, Japan
Yao Municipal Hospital, Osaka, Japan
Yen Tjing Ling Medical Foundation, Taipei, Taiwan, R.O.C.
Yokohama Surgical Research Group, Yokohama, Japan
Yoshiki Dermatology Clinic Ginza, Tokyo, Japan
Zeincro Hellas, Athens, Greece
Reviews