

## **CURRICULUM VITAE: Carlos L. Arteaga, M.D.**

### **Personal Data**

Citizenship: U.S.A.  
Family Status: Married, four children  
Professional Address: UT Southwestern  
Harold C. Simmons Cancer Center  
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(simmonscenter.org)

### **Education**

1981 (M.D.) Facultad de Ciencias Médicas, Universidad de Guayaquil,  
Ecuador

### **Post-Graduate Training**

1984-1987 Fellowship in Medical Oncology and Hematology,  
University of Texas Health Science Center at San Antonio  
1981-1984 Internship and Residency, Internal Medicine,  
Emory University Affiliate Hospitals Program, Atlanta, GA

### **Professional Experience**

Sept. 2017 – Director, Harold C. Simmons Comprehensive Cancer Center  
and Associate Dean of Oncology Programs, UT Southwestern  
Medical Center  
Sept. 2017 – Professor of Medicine, UT Southwestern Medical Center  
Sept. 2017 – The Lisa K. Simmons Distinguished Chair in Comprehensive  
Oncology  
Mar. 2013 – Aug. 2017 Director, Center for Cancer Targeted Therapies, Vanderbilt-  
Ingram Cancer Center (VICC)  
Sept. 2010 – Aug. 2017 Associate Director for Translational/Clinical Research VICC  
July 2010 – Oct 2011 Interim Director, Division of Hematology-Oncology,  
Vanderbilt University Medical Center  
Dec. 1998 – Aug. 2017 Professor of Medicine and Cancer Biology, Vanderbilt  
July 2009 – Aug. 2017 Donna S. Hall Chair in Breast Cancer Research  
Jan 1996 – Aug. 2017 Director, VICC Breast Cancer Program  
July 1995 - Sept 2000 Clinical Investigator, Department of Research &  
Development, VA Medical Center, Nashville, TN  
Mar 1994 - Feb 1998 Associate Professor (with tenure) of Medicine and Cell  
Biology, Vanderbilt University

Apr 1990 - Mar 1994	Assistant Professor of Cell Biology, Vanderbilt University
Jan 1991 - Dec 1994	Research Associate, VA Medical Center, Nashville, TN
Aug 1989 - Dec 1990	Associate Investigator, VA Medical Center, Nashville, TN
Aug 1989 - Mar 1994	Assistant Professor of Medicine (Medical Oncology), Vanderbilt University
Jan 1988 - Jul 1989	Associate Investigator, VA Medical Center, San Antonio, TX
1987-1989	Instructor in Medicine, University of Texas Health Science Center, San Antonio, TX

**Society Memberships**

Association of American Physicians (inducted 2005)  
 American Society of Clinical Investigation (inducted 1998)  
 American Society of Clinical Oncology  
 American Association for Cancer Research

**Professional Licensure**

Georgia, 1982 (no longer active)  
 Tennessee, 1989

**Specialty Certification**

Educational Commission for Foreign Medical Graduates (E.C.F.M.G.), 1979  
 Visa Qualifying Examination (National Boards I and II), 1980  
 Federal Licensure Examination (FLEX-National Boards I, II, and III), 1982  
 Board Certified in Internal Medicine, 1984  
 Board Certified in Medical Oncology, 1989  
 Board Eligible in Hematology, 1989

**Awards/Honors**

2018	Robert Sutherland Award for Excellence in Translational Research
2015	Prize for Scientific Excellence in Medicine, American-Italian Cancer Foundation
2015	Fellow of the AACR Academy
2014-2015	President, American Association for Cancer Research (AACR)
2014	Vanderbilt University Grant W. Liddle Award
2013	Fellow, American Association for the Advancement of Science (AAAS)
2011	Brinker Award (Susan G. Komen for the Cure Foundation)
2009	Gianni Bonadonna Award (American Society of Clinical Oncology)
2007-2017	American Cancer Society Clinical Research Professorship
2005	Association of American Physicians (AAP)
2003	27 <sup>th</sup> Richard & Hinda Rosenthal Foundation Award
1998	American Society of Clinical Investigation (ASCI)
1996-2000	Clinical Investigator Award, Department of Veteran Affairs

1980 Contenta Award (for top score in all years in Medical School), Facultad de Ciencias Médicas, Universidad de Guayaquil, Ecuador

### **Research Interests**

Oncogene signaling in the pathogenesis of human breast cancer  
Molecular therapeutics and mechanisms of drug resistance in human breast cancer  
Genotype-driven trials in breast cancer

### **Extramural Support (PI, current)**

**P30 CA142543** Arteaga (PI) 09/1/17-07/31/21  
NIH/NCI

UT Southwestern Cancer Center Support Grant

The goal of this project is to support the infrastructure for the promotion of interdisciplinary, translational cancer research through the efforts of senior leadership, five scientific research programs, six shared resources, protocol specific research, protocol review and monitoring, planning and evaluation activities, developmental funds, community outreach and engagement, education and training, and administration.

**P30 CA142543** (supplement) 08/01/18-07/31/21  
NIH/NCI

CCSG Supplement YR9 - Tobacco Cessation Arteaga (PI)

Administrative supplement to support the development of tobacco cessation treatment capacity and infrastructure for cancer patients.

**P30 CA142543** (supplement) 08/01/19-07/31/21  
NIH/NCI

CCSG Supplement YR10 – EDDOP/ETCTN Arteaga (PI)

Administrative supplement to support the Early Drug Development Opportunity (EDDO) program. Goals are to provide additional sites for select ETCTN trials that require screening for rare tumors, and to provide increased access among NCI cancer center's to agents under NCI development. The long-term goal is to accelerate the development of NCI-IND agents in rare cancer types to improve the outcome of cancer therapy

**P30 CA142543** (supplement) 08/01/16-07/31/21  
NIH/NCI

CCSG Supplement YR10 – Rural Cancer Control Arteaga (PI)

Administrative supplement to develop a referral-to-treatment model for underserved, minority communities along the South Texas-Mexico border, using mixed-methods.

**P50 CA098131** Pietenpol/Mayer (MPI) 09/11/08-09/30/24  
NIH/NCI SPORE in Breast Cancer - Project 1

Study goals are to determine if therapeutic blockade of PI3K adds to neoadjuvant therapy with the aromatase inhibitor letrozole in ER+/HER2-PIK3CA<sup>mut</sup> breast cancers, and to discover biomarkers in

tumor DNA, RNA, and proteins that are associated with response or resistance to estrogen deprivation in patients with operable ER+/HER2– breast cancer treated with letrozole.

Role: Consortium site PI

**BCRF-19-009** Arteaga (PI) 10/1/04-9/30/20  
Breast Cancer Research Foundation  
Oncogene signaling and resistance to antiestrogens in breast cancer  
Study goal is to determine mechanisms by which oncogene signaling induces resistance to antiestrogens in hormone receptor-positive human breast cancer cells and primary tumors

**R01 CA224899** Arteaga (PI) 08/07/18-07/31/23  
NIH/NCI  
Study goal is to determine the mechanisms by which mutant HER2 promotes breast cancer oncogenesis and to identify the treatments that are most effective against HER2-mutant breast cancers.

**RR170061** Arteaga (PI) 09/01/17-08/31/22  
Cancer Prevention Research Institute of Texas (CPRIT)  
The goal is to meaningfully contribute to Simmons Comprehensive Cancer Center becoming a major leader of translational cancer medicine in Texas and to ease the burden of cancer in its catchment area through exceptional patient care, transdisciplinary research, discovery, funding, education, partnership, and collaboration

IIDRP-16-004 Vilgelm (PI) 09/01/19-08/31/20  
**Breast Cancer Research Foundation**  
CDK4/6 inhibition modulates tumor immune microenvironment to enhance response to immunotherapy  
The goal of this project is to determine whether CDK4/6 inhibition promotes host's anti-tumor immune response by facilitating T cell recruitment into tumors, making them sensitive to immunotherapy with T cell agonists.  
Role: Co-I

**SAB1800010** Arteaga (PI) 11/16/18-11/15/21  
Susan G. Komen Breast Cancer Foundation  
Discovery of Mechanisms of Resistance of Antiestrogen Therapy in ER+ Breast Cancer  
Goals of this study are to discover actionable somatic alterations potentially associated with resistance to antiestrogen therapy in patients with ER+ breast cancer, and to determine the role of aberrant FGFR signaling on endocrine resistance of ER+ breast cancer.

**Completed Research Support**

**P50 CA098131-S1** Arteaga (PI) 09/01/16-08/31/18  
NIH/NCI  
Discovery of Targetable Mechanisms of Endocrine Resistance in ER + Breast Cancer  
The goals of this study are to (1) determine whether amplified FGFR1 maintains an ER-dependent proliferation program by physical association with ER $\alpha$  in the nucleus of estrogen-deprived ER+/FGFR1-amp breast cancers, and to confirm and quantitate the FGFR1/ER association using imaging approaches, (2) determine if FGFR1 amplification correlates with maintenance of proliferation

in patients with early ER+/HER2-breast cancer treated with a short course of palbociclib and/or with a shorter PFS in patients with advanced ER+/HER2-breast cancer treated with fulvestrant ± the CDK4/6 inhibitor abemaciclib, and (3) determine the heterogeneity of breast cancer cell states in response to fulvestrant ± the FGFR TKI lucitanib by single cell transcriptomic analysis of ER+/FGFR1-amplified patient-derived xenografts (PDXs).

**TBCRC** Arteaga (PI) 10/01/06-08/31/17  
Translational Breast Cancer Research Consortium (TBCRC)  
The goal is to implement and participate in clinical and translational investigator-initiated studies in the TBCRC

**CRP-07-234-06-COUN** Arteaga (PI) 07/01/12-06/30/17  
American Cancer Society Clinical Research Professorship  
Combinations of anti-HER2 therapies to eliminate drug resistance  
The goal of this grant is to provide the research protocol and technical support for the collection of tumor tissues as well as the equipment necessary for the analysis of drug resistant tumors

### **Patents**

Immunological Compositions as Cancer Biomarkers and/or Therapeutics  
Patent # 8,501,417; Serial No. 12/666,566; Legal Ref. No. VBLT:095US  
File date: 06/26/08; Expiration date: 12/14/29

Combinations of Kinase Inhibitors for the Treatment of Cancer  
File date: 07/08/11; Legal Ref. No. EX10-009C-PC

### **Invited Lectures** (since 2012, includes endowed lectureships)

Feb. 12 Distinguished Lecture Series, Methodist Hospital Cancer Center, Houston, TX  
Feb. 12 Keynote Speaker, IASLC 12th Annual Targeted Therapy of Lung Cancer Meeting, Santa Mónica, CA  
Mar. 12 'Meet the Oncology Expert' Seminar, Institute Jules Bordet, Brussels, Belgium  
Mar. 12 Tisch Cancer Institute Frontiers in Oncology Endowed Lecture, Mount Sinai School of Medicine, New York, NY  
Apr. 12 Speaker & Chair, Symposium *Clinical Trials of Agents Towards PI3K and Metabolic Pathways*, AACR Annual Meeting, Chicago, IL  
Apr. 12 Current Concepts and Controversies in Organ Site Research Session: Breast Cancer, AACR Annual Meeting, Chicago, IL  
Apr. 12 Distinguished Lectureship Series, University of New Mexico Cancer Center, Albuquerque, NM  
May 12 Co-Chair and Speaker, AACR Special Conference *Molecular Targeted Therapies: Mechanisms of Resistance*, San Diego, CA  
June 12 Education Session: *Toward Successful Targeting of the PI3K Pathway in Cancer*, ASCO Annual Meeting, Chicago, IL  
June 12 Keynote Speaker, Annual Meeting of the Michelangelo Foundation, Milan, Italy

July 12 Harvard CME '*Breast Cancer: New Horizons, Current Controversies,*' Dana Farber Cancer Institute, Boston, MA

July 12 7th Annual New Orleans Summer Cancer Meeting, New Orleans, LA

Aug. 12 10<sup>th</sup> International Congress on Targeted Therapies, Washington, DC

Sept. 12 Keynote Lecture, 2012 International Oncoplastic Breast Surgery Symposium & Taipei International Breast Cancer Symposium, Taipei, Taiwan

Oct. 12 University of Iowa Holden Comprehensive Cancer Center, Iowa City, IA

Oct. 12 Latest Advances in Anticancer Drugs Clinical Development, Marbella, Spain

Oct. 12 Sociedad Española de Oncología Médica (SEOM): *Building the Future* Meeting, Madrid, Spain

Nov. 12 University of Texas Southwestern Medical School, Harold C. Simmons Cancer Center, Dallas, TX

Nov. 12 National Cancer Institute Breast Cancer Models Summit, Philadelphia, PA

Dec. 12 HER2+ Breast Cancer Year in Review, Novartis Pharmaceuticals, Florham Park, NJ

Jan. 13 Frontiers in Oncology Seminar, University of Maryland Marlene & Stewart Greenebaum Cancer Center, Baltimore, MD

Mar. 13 Roche Australia's 11<sup>th</sup> Annual Hematology and Oncology Targeted Therapies (HOTT) Symposium, Sydney, Australia

Mar. 13 Duke Cancer Institute Director's Lecture Series, Duke University, Raleigh-Durham, NC

Apr. 13 Chair and Speaker, Clinical Trials Symposium *The PI3K Pathway: Biomarkers and Clinical Targeting*, AACR Annual Meeting, Washington, DC

Apr. 13 Major Symposium *Strategies to Overcoming Drug Resistance*, AACR Annual Meeting, Washington, DC

Apr. 13 IX Simposio Internacional de GEICAM, Valencia, Spain

May 13 Novartis Oncology Leader Summit (Focus in Breast Cancer), Cancún, Mexico

May 13 Neoadjuvant Treatment in Breast Cancer: Current Strategies and New Challenges, Hospital Universitario Quirón, Madrid, Spain

May 13 Valedictory Speaker, Emory University School of Medicine Graduation Class of 2013, Atlanta, GA

May 13 Co-chair and speaker, European Union Breast Cancer Investigators Meeting, Barcelona, Spain

June 13 Educational Session *Is It Time to Split More Cancers into Molecular Bins to Enhance Drug Selection?* ASCO Annual Meeting, Chicago, IL

June 13 Breast Unit Network Award Lecture, Breast Cancer: Progress and Controversies, Università degli Studi di Napoli, Naples, Italy

June 13 Symposium *Emerging Paradigms in ErbB Family Function*, Endocrine Society Annual Meeting, San Francisco, CA

July 13 Keynote speaker, GECOPERÚ/Fundación Instituto Hipólito Unanue, Foro Internacional de Investigación Clínica, Lima, Perú

Sept. 13 Yale Cancer Center Grand Rounds, Yale School of Medicine, New Haven, CT

Oct. 13 Co-chair and speaker, 6<sup>th</sup> AACR Special Conference *Advances in Breast Cancer Research*, San Diego, CA

Oct. 13 Co-chair and speaker, 5<sup>th</sup> International Oncology Conference *Current Status & Future of Anti-Cancer Targeted Therapies*, Buenos Aires, Argentina

Oct. 13 Breast Cancer Partridge Foundation, Bangor, Maine

Oct. 13 AACR-NCI-EORTC Molecular Targets Conference, Boston, MA

Nov. 13 Baptist Kentucky Cancer Center Symposium, Louisville, KY

Nov. 13 10<sup>th</sup> Latin American Workshop on Molecular Targeted Therapy of Cancer (MTTC), Sao Paulo, Brazil

Dec. 13 Mini-symposium *HER2+ Breast Cancer: Unresolved Challenges*, CTRC-AACR Annual San Antonio Breast Cancer Symposium, San Antonio, TX

Jan. 14 XI Annual Miami Cancer Meeting, Miami, FL

Jan. 14 Clovis Oncology Research & Development Day, New York, NY

Feb. 14 Kimura Memorial Lecture, Nagoya International Cancer Treatment Symposium, Nagoya, Japan

Mar. 14 Dean's Distinguished Seminar Series, University of Colorado, Denver, CO

Mar. 14 Novartis Breast Cancer Investigators Meeting, Phoenix, AZ

April 14 Chair & Speaker, Current Concepts in Breast Cancer Research, AACR Annual Meeting, San Diego, CA

Apr. 14 9<sup>th</sup> Santiago International Breast Cancer Symposium, Santiago de Chile, Chile

May 14 Annual Meeting American Society of Breast Surgeons, Las Vegas, NV

June 14 Plato Foundation Fellows Forum in Breast Oncology, ASCO Annual Meeting, Chicago, IL

June 14 Pezcoller Foundation Symposium on Cancer Science, Trento, Italy

July 14 Susan G. Komen for the Cure Breast Cancer Foundation Leadership Conference, Dallas, TX

Aug. 14 Breast Cancer Molecular Biology Symposium, Medellín, Colombia

Sept. 14 Think Tank in Breast Cancer, Georgia ASCO, Atlanta, GA

Sept. 14 Lilly University, Lilly Research Laboratories, Indianapolis, IN

Oct. 14 Distinguished Speaker, Annual Pelotonia Fellowship Symposium, The James Comprehensive Cancer Center, Ohio State University, Columbus, OH

Oct. 14 Highlights of AACR Conference, Shanghai, China

Oct. 14 Keynote speaker, Albany Medical Center/NY Oncology-Hematology Translational Research Symposium, Albany, NY

Oct. 14 2014 Annual Oncology Leaders Summit (OLS) 'Breast Cancer: Blueprints for Tomorrow,' Barcelona, Spain

Nov. 14 Greenspan Memorial Lectureship, Chemotherapy Foundation Symposium Innovative Cancer Therapy for Tomorrow, New York, NY

Nov. 14 26<sup>th</sup> AACR-NCI-EORTC Symposium on Molecular Targets and Cancer Therapeutics, Barcelona, Spain

Feb. 15 Dean's Distinguished Seminar Series, Meyer Cancer Center at Weill Cornell Medical College, New York, NY

Mar. 15 Symposium *Mechanisms of Resistance in Endocrine Cancers*, 97<sup>th</sup> Annual Meeting of the Endocrine Society, San Diego, CA

April 15 AACR Annual Meeting 2015 Highlights: Vision for the Future, AACR Annual Meeting, Philadelphia, PA

June 15 NCCN Policy Summit: Emerging Issues in Tissue Allocation, National Press Club, Washington, DC

June 15 Susan G. Komen for the Cure Breast Cancer Foundation Leadership Conference, Dallas, TX

July 15 14<sup>th</sup> International Congress on the Future of Breast Cancer, Huntington Beach, CA

July 15 AACR-FDA Science Series: Highlights from the 2015 AACR Annual Meeting, Rockville, MD

Sept. 15 Keynote address, University of Virginia Cancer Center Annual Retreat, Charlottesville, VA

Sept. 15 University of Wisconsin Carbone Cancer Center Grand Rounds, Madison, WI

Oct. 15 Current Status & Future of Anti-Cancer Targeted Therapies Conference, Buenos Aires, Argentina

Oct. 15 Molecular Therapeutics in Breast Cancer Symposium, Bariloche, Argentina

Oct. 15 AACR Special Conference Advances in Breast Cancer Research, Bellevue, Washington

Nov. 15 American-Italian Cancer Foundation 2015 Prize for Scientific Excellence in Medicine, Memorial-Sloan Kettering Cancer Center, New York, NY

Nov. 15 AACR New Horizons in Cancer Research Conference, Shanghai, China

Feb. 16 10<sup>th</sup> AACR-Japanese Cancer Association (JCA) International Conference, Maui Hawaii

Feb. 16 Association of Professors of Medicine, Charleston, SC

Mar. 16 Albert Einstein Cancer Center Distinguished Lecture Series, New York, NY

Mar. 16 Distinguished Lecture at Wistar Institute, Philadelphia, PA

May 16 Osborne Symposium 'Making a Difference – Breast Cancer & Beyond', Dan L. Duncan Comprehensive Cancer Center, Baylor College of Medicine, Houston, TX

June 16 National Cancer Institute of Mexico (INCan), Mexico City, Mexico

July 16 Sociedad Peruana de Oncología Médica (SPOM), Lima, Perú

July 16 15<sup>th</sup> Annual International Congress on the Future of Breast Cancer, New York, NY

Aug. 16 Lilly Research Laboratories, Indianapolis, IN

Aug. 16 Medical Oncology Grand Rounds, Moffitt Cancer Center, Tampa, FL

Sept. 16 Keynote lecture, Annual Congress of the Italian Cancer Society, Verona, Italy

Sept. 16 Symphogen, Ballerup, Denmark

Oct. 16 2016 Baldwin Lecture, SUNY Upstate Medical University, Syracuse, NY

Oct. 16 Keynote Speaker, Shanghai Annual Breast Cancer Conference, Fudan University, Shanghai, China

Nov. 16 2016 Elwood Jensen Cancer Symposium on Breast Cancer, University of Cincinnati College of Medicine, Cincinnati, OH

Nov. 16 Memorial Breast Cancer Symposium, Hollywood, FL

Nov. 16 2016 UCSF Helen Diller Family Comprehensive Cancer Center Symposium on Therapeutic Resistance, San Francisco, CA

Nov. 16 Guardant Health, San Francisco, CA

Nov. 16 *Desafío Oncológico: Más Allá del Genoma*, Hospital General Universitario de Valencia e Instituto Valenciano de Oncología, Valencia, Spain

Dec. 16 28<sup>th</sup> EORTC-NCI-AACR Symposium 'Molecular Targets and Cancer Therapeutics', Munich, Germany

Jan. 17 Best of SABCS China 2017, Beijing and Shanghai, China



Feb. 17 Keynote Speaker, UC San Francisco Breast Oncology Program Scientific Retreat, San Francisco, CA

April 17 'Meet the Research Icon', AACR Annual Meeting, Washington, DC

April 17 Keynote Speaker, First Annual Precision Oncology Conference, University of Calgary, Calgary, Canada

May 17 Co-Chair and Speaker, AACR Translational Cancer Medicine Symposium, Sao Păulo, Brazil

June 17 6<sup>th</sup> Annual PLATO Foundation Fellows Forum in Breast Oncology, ASCO Annual Meeting, Chicago, IL

June 17 Department of Medical Oncology, University of Naples Federico II, Naples, Italy

July 17 15<sup>th</sup> Annual International Congress on the Future of Breast Cancer, San Diego, CA

Sept. 17 Keynote Speaker, Taiwan Breast Cancer Symposium, Taipei, Taiwan

Oct. 17 VII Inter-American Oncology Conference 'Current Status & Future of Anti-Cancer Targeted Therapies', Buenos Aires, Argentina

Oct. 17 Co-chair & Speaker, FDA-AACR Workshop on Liquid Biopsies in Oncology, Washington, D.C.

Oct. 17 Third Annual Gabriel Hortobagyi Lecture, Division of Cancer Medicine, UT MD Anderson Cancer Center, Houston, TX

Oct. 17 Isom Lecture, University of Texas Southwestern Medical Center, Dallas, TX

Nov. 15 35<sup>th</sup> Annual Chemotherapy Foundation Symposium, New York, NY

Nov. 17 Beth Israel Deaconess Medical Center Seminar Series, Boston, MA

Nov. 17 4<sup>th</sup> Annual Gayle Brinkenhoff Symposium in Breast Cancer, City of Hope Comprehensive Cancer Center, Los Angeles, CA

Dec. 17 Expert Forum on Emerging Trends in Breast Cancer, Dallas, TX

Jan. 18 Distinguished Scientist, Moores Cancer Center Director's Seminar Series, UC San Diego, San Diego, CA

Mar. 18 Susan G. Komen Scholar Engagement at Moncrief Cancer Institute, Fort Worth, TX

Mar. 18 Department of Surgery Grand Rounds, UT Southwestern Medical Center, Dallas, TX

April 18 Unsolved Mysteries Session, 2018 Annual Meeting of the AACR, Chicago, IL

April 18 Santiago de Chile Breast Cancer Symposium, Santiago, Chile

May 18 Keynote Speaker, Breast Cancer Program Retreat, The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, Baltimore, MD

May 18 2<sup>nd</sup> OrigiMed Summit for Cancer Discovery, Shanghai, China

June 18 2018 China-America Summit Forum in Breast Cancer, Guangzhou, China

July 18 'Robert Sutherland Award for Excellence in Translational Research' Lecture, Breast Cancer Trials, Sydney, Australia

July 18 Garvin Institute of Medical Research, Sydney, Australia

Sept. 18 Co-Chair and Speaker, 2<sup>nd</sup> AACR Translational Cancer Medicine Symposium, Sao Păulo, Brazil

Oct. 18 Keynote Speaker, NCI Symposium on Mechanisms of Cancer Drug Resistance and Sensitivity, Rockville, MD

Nov. 18 17<sup>th</sup> Ann Rod & Cecil Mortel Visiting Scholar in Cancer Research Lecture Series, Hershey, PA

Dec. 19 Dava Oncology Breast Cancer Expert Forum, Dallas, TX

Jan. 19 Annual Best of SABCS Shenzhen Program, Shenzhen, China

Mar. 19 Personalized Precision Oncology: Current Status & Future Perspectives Symposium, Madrid, Spain

April 19 Keynote speaker, Global Breast Cancer Conference 2019, Songdo, Incheon, Korea

May 19 Dan L. Duncan Comprehensive Cancer Center Seminar Series, Baylor College of Medicine, Houston, TX

June 19 Keynote speaker, 2019 China America Summit Forum in Breast Cancer, Guangzhou, China

Aug. 19 Duke Cancer Institute and Women's Cancer Program, Duke University School of Medicine, Durham, NC

Oct. 19 2019 American Cancer Society CAN North Texas Policy Forum, Irving, TX

Oct. 19 8<sup>th</sup> Inter-American Oncology Conference 'Current Status and Future of Anti-Cancer Therapies', Buenos Aires, Argentina

Oct. 19 AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics, Boston, MA

Nov. 19 Second Pacific Rim Breast Cancer Summit, Tianjin, China

Nov. 19 Texas Health Resources Grand Rounds, Presbyterian Hospital, Dallas, TX

Nov. 19 American Cancer Society Annual Research Dinner, Fort Worth, TX

Feb. 20 MD Anderson 2<sup>nd</sup> Annual Advanced Breast Cancer Conference, Houston, TX

Oct. 20 AACR Special Conference Advances in Breast Cancer Research, San Diego, CA

Nov. 20 Keynote Speaker, California State University Interdisciplinary Cancer Meeting (CSU-ICM), Los Angeles, CA

### **Editorial Experience**

Deputy Editor *Clinical Cancer Research*, 2005-2013

Associate Editor *Journal of Mammary Gland Biology & Neoplasia*, 1996-

Editorial Board *Cancer Discovery*, 2014-  
*Cancer Cell*, 2006-  
*npj Precision Oncology*, 2016-  
*Breast Cancer Research*, 1999-  
*Clinical Cancer Research*, 2001-2004  
*Molecular Cancer Therapeutics*, 2001-2008  
*Journal of Clinical Oncology*, 2003-2005

Ad hoc reviewer for *Cancer Cell*, *Journal of Clinical Investigation*, *New England Journal of Medicine*, *Cancer Research*, *Nature Medicine*, *Nature Cell Biology*, *Proceedings National Academy of Sciences U.S.A.*, *Molecular and Cellular Biology*, *Journal of Biological Chemistry*, *Molecular Biology of the Cell*, *Oncogene*, *Cell Growth & Differentiation*, *Journal of the National Cancer Institute*, *Clinical Cancer Research*, *Journal of Experimental Medicine*, *Journal of Clinical Oncology*, *Experimental Cell Research*, *Molecular Carcinogenesis*, *Nature Reviews Cancer*, *Nature Reviews Drug Discovery*

### **External Advisory Activities**

External Advisory Board

Lurie Cancer Center at Northwestern University (current)  
NYU Perlmutter Cancer Center (current)  
Mayo Clinic Cancer Center (current)  
Dana Farber/Harvard Consortium Cancer Center (current)  
University of Iowa Cancer Center  
Lombardi Cancer Center at Georgetown University  
University of Vermont Cancer Center  
Vall d'Hebron Institute of Oncology, Barcelona, Spain  
Investigational Therapeutics in Oncological Sciences  
(INTHEOS), Madrid, Spain  
Strategic Research Cluster, Molecular Therapeutics for  
Cancer Ireland (MTCI)

External Advisory Board

Dana Farber/Harvard Breast Cancer SPORE (Chair, current)  
University of Chicago Breast Cancer SPORE  
Lurie Cancer Center Breast Cancer SPORE  
Duke University Breast Cancer SPORE  
Johns Hopkins Breast Cancer SPORE  
Dana Farber/Harvard Lung Cancer SPORE  
Emory University Breast Cancer SPORE  
MD Anderson Ovarian Cancer SPORE  
P01 Growth Factor Receptor Signaling in Breast Cancer and  
Metabolic Regulation (M-C Hung, PhD, PI)  
UT Southwestern Kidney SPORE  
MD Anderson Breast Cancer SPORE  
Albert Einstein Cancer Center Breast Cancer SPORE  
U of Michigan Cancer Center Breast Cancer SPORE  
Memorial Sloan-Kettering Cancer Center Breast SPORE  
UT San Antonio/Houston Methodist Hospital Breast Cancer  
SPORE

Member, Steering Committee NCI MATCH Trial

Member, NSABP/SPORE Advisory Board, 2006 – 2011

Susan G. Komen Breast Cancer Research Foundation, Scientific Advisory Board, 2011 –

Member, Investigator Steering Committee for the Oncology Research Program (ORP), National  
Comprehensive Cancer Network (NCCN), 2013 –

Scientific Advisory Board, Southwest Oncology Group, 2005-2010

Non-melanoma Skin Cancer Program, MD Anderson Cancer Center, External Advisory Board, 2002

### **Extramural Reviewer**

Member, NCI Basic Mechanisms of Cancer Therapy (BMCT) Review Group, 2015 –

Member, Stand Up to Cancer (SU2C) Scientific Advisory Committee (SAC), 2016 –

Chair, Scientific Review Committee for Next Gen Grants for Transformative Cancer Research Awards (AACR 2015-7)

Chair, Susan G. Komen Breast Cancer Research Foundation Promise Grant Review, 2011

Chair, Susan G. Komen Breast Cancer Research Foundation Promise Grant Review, 2009

Member, NCI Parent Subcommittee A (for Review of Cancer Centers), 2004-2008

Ad hoc Reviewer, Basic Mechanisms of Cancer Therapies (BMCT) NIH/NCI Study Section, 2007-2009

Ad-hoc Reviewer, NIH/NCI SPORE Study Section, Feb. 2010

Member, Experimental Therapeutics-2 NIH/NCI Study Section, Oct 98-June 03

Co-Chair, NIH Dermatology Branch Site Visit Committee, Bethesda, MD, Nov. 2001

U.S. Army Medical Research & Development Command: Breast Cancer Study Section of Endocrinology, Feb 1994, Sept 1996; Study Section of Medical Genetics, Sept. 1997; Study Section of Pathobiology-2, Sept. 1998, Aug. 1999; Concept Awards Review Group, May 2000; Integration Panel member, Nov. 2000

California Breast Cancer Research Program: Chair Basic Breast Biology Review Committee, April 1997

### **National Committees & Service**

Member, Board of Directors American Association of Cancer Institutes (AACI) 2020-

President, American Association for Cancer Research (AACR) 2014-2015

AACR Board of Directors, 2004-2007

Co-Chair (for AACR), San Antonio Breast Cancer Symposium 2009 –

Member, Board of Scientific Counselors, Division of Clinical Sciences NCI/NIH, 1999-2004

Chair, AACR Special Conferences Committee, 2002-2008

Co-Chair, NCI Workshop *Biology of Brain Metastases*, Bethesda, MD (2008)

General Motors Cancer Research Foundation Selection Committee (Charles F. Kettering Prize), 2004-2007

ASCO Education Committee, 2003-2006

Member, ECOG Breast Cancer Core Committee, 1998-current

Co-Chair ECOG Developmental Therapeutics Committee, 2003-2006

Chair, AACR Special Conference *Advances in Breast Cancer Research*, 2003, 2005, 2007, 2009, 2013

Chair, AACR/NCI/EORTC 2001 Meeting on *Molecular Targets and Cancer Therapeutics*, Miami, FL

Chair, AACR Fellowships Award Committee, 2001

American Association for Cancer Research, Public Education Committee, 2000-2003

Co-Chair for Translational Research, AACR 2000 Annual Meeting Program

ASCO Breast Cancer Subcommittee, 2000

ASCO Tumor Biology/Human Genetics Program Sub-Committee, 1997

NCI Breast Cancer Progress Review Group, 1997

**Trainees** (followed by current or immediate position after training; all post-doctoral unless otherwise specified)

Katri Koli, PhD (1995-1997); Docent, University Researcher, Molecular Cancer Biology Program, University of Helsinki, Helsinki, Finland

Tohru Ohmori, MD, PhD (1995-1997); Head/Associate Professor, Institute of Molecular Oncology, Department of Internal Medicine, Showa University School of Medicine, Tokyo, Japan

Hirokazu Kurokawa, MD, PhD (1998-2001); Vice-Director, Department of Respiratory Medicine, Akita Red Cross Hospital, Akita, Japan

Anne E.G. Lenferink, PhD (1998-2000); Research Officer, National Research Council, Biotechnology Research Institute, Canada

Wichai Chinratanalab, MD (1999-2000); Assistant Professor, Division of Hematology-Oncology, Department of Medicine, Vanderbilt University

Stacy L. Moulder, MD (1999-2001); Professor, Department of Breast Medical Oncology, MD Anderson Cancer Center, Houston, TX

Roberto Bianco, MD (1999-2001); Assistant Professor and Laboratory Director, Department of Endocrinology and Oncology, University Federico II, Naples, Italy

Michael S. Yakes, PhD (1999-2001); Senior Director of Pharmacology, Exelixis, San Francisco, CA

Christoph A. Ritter, PhD (2001-2002); Professor, Institut für Pharmazie, Klinische Pharmazie, Greifswald, Germany

Nancy Dumont, PhD (graduate student 1997-2002; post-doctoral fellow 2002-2003); Senior Scientist, Merrimack Pharmaceuticals 2013

Andrei V. Bakin, PhD (1999-2003); Associate Professor of Oncology, Department of Cancer Genetics, Roswell Park Cancer Institute, Buffalo, NY

Yasuhiro Koh, MD (2002-2005); Chief, Drug Discovery & Development Division, Shizuoka Cancer Center Research Institute, Shizuoka, Japan

Incheol Shin, PhD (1999-2005). Associate Professor, Hanyang University, Seoul, Korea

Jae Youn Yi, PhD (2001-2004); Assistant Professor, Ewha Women's University, Seoul, Korea

Marianela Pérez-Torres, PhD (2004-2006); Assistant Professor, University of Puerto Rico, School of Pharmacy, San Juan, Puerto Rico

Emily Wang, PhD (2003-2008); Associate Professor, Department of Tumor Cell Biology, Moores Cancer Center at UC San Diego, San Diego, CA

Ingrid A. Mayer, MD (MSCI 2004-2006); Professor, Division of Hematology-Oncology, Department of Medicine, Vanderbilt University

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### **Peer Reviewed Publications**

1. Smith JL, **Arteaga CL**, Heymsfield SB. Increased ureagenesis and impaired nitrogen use during infusion of a synthetic amino acid formula. *N Engl J Med* 306:1013-1018, 1982
2. Heymsfield SB, **Arteaga CL**, McManus C, Smith J, Moffitt S. Measurement of muscle mass in humans: Validity of the 24-hour urinary creatinine method. *Am J Clin Nutr* 37:478-494, 1983
3. Hanauske A-R, Osborne CK, Chamness GC, Clark GM, Forseth BJ, Buchok JB, **Arteaga CL**, Von Hoff DD. Alteration of EGF-receptor binding in human breast cancer cells by antineoplastic agents. *Eur J Clin Oncol* 23:505-551, 1987
4. Hanauske A-R, **Arteaga CL**, Clark GM, Buchok JB, Marshall M, Hazarika P, Pardue RL, Von Hoff DD. Determination of transforming growth factor activity in effusions from cancer patients. *Cancer* 61:1832-1837, 1987
5. **Arteaga CL**, Kisner DL, Goodman A, Von Hoff DD. Elliptinium: A DNA intercalating agent with broad antitumor activity in a human tumor cloning system. *Eur J Clin Oncol* 23:1621-1626, 1987
6. **Arteaga CL**, Hanauske A-R, Clark GM, Osborne CK, Hazarika P, Pardue RL, Tio F, Von Hoff DD. Immunoreactive alpha transforming growth factor (I $\alpha$ TGF) activity in effusions from cancer patients as a potential marker of tumor burden and patient prognosis. *Cancer Res* 48:5023-5028, 1988
7. **Arteaga CL**, Forseth B, Clark GM, Von Hoff DD: Radiometric method for chemotherapy sensitivity: Results of screening a panel of breast cancer cells lines. *Cancer Res* 47:6248-6253, 1987
8. **Arteaga CL**, Tandon AK, Von Hoff DD, Osborne CK: Transforming growth factor beta: Potential autocrine growth inhibitor of estrogen receptor negative human breast cancer cells. *Cancer Res* 48:3898-3904, 1988

9. **Arteaga CL** and Clark GM: Inefficacy of mitoguazone in patients with recurrent head and neck squamous cell carcinoma. *Invest New Drugs* 7:281-283, 1989
10. **Arteaga CL**, Coronado EB, Osborne CK: Blockade of the epidermal growth factor receptor inhibits transforming growth factor alpha-induced but not estrogen-induced growth of hormone-dependent human breast cancer. *Mol Endocrinol.* 2:1064-1069, 1988
11. **Arteaga CL**, Kitten L, Coronado E, Jacobs S, Kull F, Alred C, Osborne CK: Blockade of the type I somatomedin receptor inhibits growth of human breast cancer cells in athymic mice. *J Clin Invest.* 84:1418-1423, 1989
12. **Arteaga CL**, Brown T, Kuhn J, Beougher K, O'Rourke T, Shen H, Brentzel J, Von Hoff DD, Weiss GR: Phase I clinical and pharmacokinetic trial of Brequinar Sodium (DUP 785; NSC 368390). *Cancer Res* 49:4648-4653, 1989
13. **Arteaga CL** and Osborne CK. Growth inhibition of human breast cancer cells *in vitro* with an antibody against the type I somatomedin receptor. *Cancer Res* 49:6237-6242, 1989
14. Osborne CK, Kitten L, **Arteaga CL**: Antagonism of chemotherapy-induced cytotoxicity for human breast cancer cells by anti-estrogens. *J Clin. Oncol.* 7:710-717, 1989
15. Osborne CK and **Arteaga CL**. Autocrine and paracrine growth regulation of breast cancer: Clinical implications. *Breast Cancer Res. Treat.* 15:3-11, 1989
16. Osborne CK, Coronado EB, **Arteaga CL**, Kitten LJ, Fuqua SAW, Ramasharma K, Marshall M, Li CH. Insulin-like growth factor II (IGF-II): A potential autocrine/paracrine growth factor for human breast cancer acting via the IGF-I receptor. *Mol. Endocrinol.* 3:1701-1709, 1989
17. **Arteaga CL**, Coffey RJ, Dugger TC, McCutchen CM, Moses HL, Lyons RM. Growth stimulation of human breast cancer cells with anti-TGF $\beta$  antibodies: Evidence for negative autocrine regulation by TGF $\beta$ . *Cell Growth & Diff* 1:367-374, 1990
18. Osborne CK, Clemmons DR, **Arteaga CL**. Regulation of breast cancer growth by insulin-like growth factors. *J Steroid Biochem* 37:805-809, 1990
19. **Arteaga CL**, Johnson MD, Todderud G, Coffey RJ, Carpenter G, Page DL. Elevated content of the tyrosine kinase substrate phospholipase C- $\gamma$ 1 in primary human breast carcinomas. *Proc Natl Acad Sci USA*, 88:10435-10439, 1991
20. **Arteaga CL**, Coffey RJ. Transforming growth factor- $\beta$  isoforms in mammary neoplasia: More questions than answers. *Human Pathol* 23:1-3, 1992
21. Romano M, Polk W, Awad J, **Arteaga CL**, McClure RW, Nanney LB, Coffey RJ. Transforming growth factor  $\alpha$ -mediated protection against drug-induced injury to the rat gastric mucosa. *J Clin Invest* 90:2409-2421, 1992
22. **Arteaga CL**, Carty-Dugger T, Moses HL, Hurd SD, Pietenpol JA. Transforming growth factor (TGF)- $\beta$ 1 can induce estrogen-independent tumorigenicity of human breast cancer cells in athymic mice. *Cell Growth & Diff* 4:193-201, 1993
23. Halter S, Winnier AR, **Arteaga CL**. Pretreatment with vitamin A inhibits transforming growth factor  $\alpha$  stimulation of human mammary carcinoma cells. *J Cell Physiol* 156:80-87, 1993



24. Hernández-Sotomayor SMT, **Arteaga CL**, Soler C, Carpenter G. Epidermal growth factor stimulates substrate selective phosphotyrosine phosphatase activity. *Proc Natl Acad Sci USA* 90:7691-7695, 1993
25. **Arteaga CL**, Hurd SD, Winnier AR, Johnson MD, Fendly BM, Forbes JT. Anti-transforming growth factor (TGF)- $\beta$  antibodies inhibit breast cancer cell tumorigenicity and increase mouse spleen natural killer cell activity: Implications for a possible role of tumor cell/host TGF $\beta$  interactions in human breast cancer progression. *J Clin Invest* 92:2569-2576, 1993
26. **Arteaga CL**, Dugger TC, Winnier AR, Forbes JT. Evidence for a positive role of transforming growth factor  $\beta$  in human breast cancer cell tumorigenesis. *J Cell Biochem* 17G: 187-193, 1993
27. Shawver LK, Mann E, Ellinger SS, Carty-Dugger T, **Arteaga CL**. Ligand-like effects induced by anti-c-erbB-2 antibodies do not correlate and are not required for growth inhibition of human carcinoma cells. *Cancer Res* 54:1367-1373, 1994
28. Johnson MD, Horiba M, Winnier AR, **Arteaga CL**. The epidermal growth factor receptor tyrosine kinase is associated with phospholipase C- $\gamma$ 1 in meningiomas. *Human Pathol* 25:146-153, 1994
29. **Arteaga CL**, Winnier AR, Poirier MC, Lopez-Larrazza DM, Shawver LK, Hurd SD, Stewart SJ. p185<sup>c-erbB-2</sup> signaling enhances cisplatin-induced cytotoxicity in human breast carcinoma cells: Association between an oncogenic receptor tyrosine kinase and drug-induced DNA repair. *Cancer Res* 54:3758-3765, 1994
30. Disatnik M-H, Winnier AR, Mochly-Rosen D, **Arteaga CL**. Distinct responses of protein kinase C isozymes to c-erbB-2 activation in SKBR-3 human breast carcinoma cells. *Cell Growth & Diff* 5:873-880, 1994
31. **Arteaga CL**, Hurd SD, Dugger TC, Winnier AR, Robertson JB. Epidermal growth factor (EGF) receptors in human breast carcinoma cells: A potential selective target for transforming growth factor  $\alpha$ -Pseudomonas exotoxin 40 (TGF $\alpha$ -PE40) fusion protein. *Cancer Res* 54:4703-4709, 1994
32. **Arteaga CL**, Holt JT. Tissue-targeted antisense FOS retroviral vector inhibits established breast cancer xenografts in athymic mice. *Cancer Res* 56: 1098-1103, 1996
33. **Arteaga CL**, Hurd SD, Dugger TC, Forbes JT. The multifunctional role of transforming growth factor (TGF)- $\beta$ s on mammary epithelial cell biology. *Breast Cancer Res Treat* 38:49-56, 1996
34. Tagliaferri P, Tortora G, Guarrasi R, Damiano V, Ruggiero A, Morelli D, Caraglia M, Bianco R, di Isernia G, Pepe S, **Arteaga CL**, Ciardiello F. Differential sensitivity to non-MHC-restricted rIL-2 activated lymphocyte killing of human mammary epithelial MCF-10A cells overexpressing oncogenes of PKA subunits. *Clin Cancer Res* 2:207-214, 1996
35. Holt JT, Thompson ME, Szabo C, Robinson-Benion C, **Arteaga CL**, King M-C, Jensen RA. Growth retardation and tumor inhibition by BRCA1. *Nature Genet* 12:298-302, 1996
36. Holt JT, **Arteaga CL**, Robertson D, Moses HL. Gene therapy for the treatment of metastatic breast cancer by in vivo transduction with breast-targeted retroviral vectors expressing antisense c-fos RNA. *Human Gene Ther* 7:1367-1380, 1996

37. Muller WJ, **Arteaga CL**, Muthuswamy SK, Webster MA, Cardiff RD, Mese KS, Li F, Halter S, Coffey RJ. Synergistic interaction of the neu proto-oncogene and TGF $\alpha$  in the mammary epithelium of transgenic mice. *Mol. Cell. Biol.* 16:5726-5736, 1996
38. Koli KM, Ramsey TT, Ko Y, Dugger TC, Brattain MG, **Arteaga CL**. Blockade of TGF $\beta$  signaling does not abrogate antiestrogen-induced growth inhibition of human breast carcinoma cells. *J Biol Chem* 272: 8296-8302, 1997
39. Dixit M, Yang J-L, Poirier MC, Price JO, Andrews PA, **Arteaga CL**. Abrogation of cisplatin-induced programmed cell death in human breast cancer cells by epidermal growth factor antisense RNA. *J Natl Cancer Inst* 89:365-373, 1997
40. Koli KM, **Arteaga CL**. Predominant cytosolic localization of type II transforming growth factor  $\beta$  receptors in human breast carcinoma cells. *Cancer Res* 57: 970-977, 1997
41. **Arteaga CL**, Ramsey TT, Shawver LK, Guyer CA. Unliganded EGF receptor dimerization induced by direct interaction of quinazolines with the ATP binding site. *J. Biol. Chem.* 272: 23247-23254, 1997
42. Koli KM, **Arteaga CL**. Processing of transforming growth factor- $\beta$  type I and II receptors: Biosynthesis and ligand-induced regulation. *J Biol Chem* 272:6423-6427, 1997
43. Ohmori T, **Arteaga CL**. Protein kinase C Epsilon translocation and phosphorylation by cis-Diamminedichloroplatinum (II) (CDDP): Role in CDDP-mediated cytotoxicity. *Cell Growth & Diff.* 9:345-353, 1998
44. Ko Y, Koli KM, Li W, Zoborowska E, Willson JKV, Brattain MG, **Arteaga CL**. A kinase-defective transforming growth factor - $\beta$  receptor type II is a dominant-negative regulator of human breast carcinoma MCF-cells. *Int. J. Oncol.:* 12:87-94, 1998
45. Ohmori T, Yang J-L, Price JO, **Arteaga CL**. Blockade of tumor cell transforming growth factor (TGF)- $\beta$ s enhances cell cycle progression and sensitizes human breast carcinoma cells to cytotoxic chemotherapy. *Exp. Cell Research* 245: 350-359, 1998
46. Ciardiello F, Dixit M, di Isernia G, Damiano V, Bianco R, Bianco R, **Arteaga CL**, Tortora G. Down-regulation of type I protein kinase A by transfection of human breast cancer cells with an epidermal growth factor antisense expression vector. *Breast Cancer Res Treat:* 47: 57-62, 1998
47. **Arteaga CL**, Koli KM, Dugger TC, Clarke R. Reversal of tamoxifen resistance of human breast carcinomas in vivo by neutralizing antibodies to transforming growth factor- $\beta$ . *J. Natl. Cancer Inst.* 91: 46-53 1999
48. Srivastava DK, Husain I, **Arteaga CL**, Wilson SH. DNA polymerase  $\beta$  expression differences in selected human tumors and cell lines. *Carcinogenesis* 20:1049-1054, 1999
49. Gobbi H, DuPont WD, Simpson JF, Plummer WD, Schuyler PA, Olson SJ, **Arteaga CL**, and Page DL. Relationship between TGF $\beta$  type II receptor expression and breast cancer risk in women with epithelial hyperplasia lacking atypia. *J. Natl. Cancer Inst.* 91:2096-2101, 1999
50. Busse D, Doughty RJ, Ramsey TT, Russell WE, Price JO, Flanagan WM, Shawver LW, and **Arteaga CL**. Reversible G1 arrest induced by inhibition of the EGF receptor tyrosine kinase

requires upregulation of p27<sup>Kip1</sup> independent of MAP kinase activity. *J. Biol. Chem.* 275:6987-6995, 2000

51. Gobbi H, **Arteaga CL**, Jensen RA, Simpson JF, DuPont, WD, Olson SJ, Schuyler PA, Plummer D, and Page DL. Loss of expression of transforming growth factor  $\beta$  type II receptor expression correlates with high tumor grade in human breast in situ and invasive carcinomas. *Histopathol.* 36:168-177, 2000
52. Dumont N, **Arteaga CL**. Tumor-promoting effects of the transforming growth factor (TGF)- $\beta$ s. *Breast Cancer Res.* 2:125-132, 2000
53. Lenferink AEG, Simpson JF, Shawver LK, Coffey RJ, Forbes JT, and **Arteaga CL**. Blockade of the EGF receptor tyrosine kinase prevents tumorigenesis in MMTV/*neu* + MMTV/*TGF $\alpha$*  bigenic mice. *Proc. Natl. Acad. Sci. USA* 97:9609-9614, 2000
54. Busse D, Doughty RS, **Arteaga CL**. HER2/*neu* (*erbB-2*) signaling and the cell cycle. *Semin. Oncol.* 27 (Suppl. 11):3-8, 2000.
55. Kurokawa H, Lenferink AEG, Simpson JF, Pisacane PI, Sliwkowski MX, Forbes JT, **Arteaga CL**. Inhibition of HER2/*neu* (*erbB-2*) and mitogen-activated protein kinases enhances tamoxifen action against HER2-overexpressing, tamoxifen-resistant human breast cancer cells. *Cancer Res* 60:5887-5894, 2000
56. Bakin AV, Tomlinson AK, Bhowmick NA, Moses HL, **Arteaga CL**. Phosphatidylinositol-3 kinase function is required for TGF $\beta$ -mediated epithelial to mesenchymal transition and cell migration. *J. Biol. Chem.* 275:36803-36810, 2000
57. Bhowmick NA, Ghiassi M, Bakin AV, Aakre M, Lundquist CA, Engel ME, **Arteaga CL**, Moses HL. Transforming growth factor- $\beta$ 1 mediates epithelial to mesenchymal trans-differentiation through a RhoA-dependent mechanism. *Mol. Biol. Cell* 12:27-36, 2001
58. **Arteaga CL**, Chinratanalab W, Carter MB. Inhibitors of HER2/*neu* (*erbB-2*) signal transduction. *Semin. Oncol.* 28 (Suppl. 18):30-35, 2001
59. Busse D, Yakes FM, Lenferink AEG, **Arteaga CL**. Tyrosine kinase inhibitors: Rationale, mechanisms of action, and implications for drug resistance. *Semin. Oncol.* 28 (Suppl. 16):47-55, 2001
60. Muraoka RS, Lenferink AEG, Simpson J, Brantley DM, Roebuck LR, Yakes FM, **Arteaga CL**. Cyclin-dependent kinase inhibitor p27<sup>Kip1</sup> is required for mouse mammary gland morphogenesis and function. *J. Cell Biol.* 153:917-931, 2001
61. McEarchern JA, Kobie JJ, Wu R, Meade-Tomlin L, Dumont N, Seftor E, **Arteaga CL**, Hendrix MJC, Akporiaye ET. Invasion and metastases of a mouse mammary tumor involves autocrine transforming growth factor (TGF)- $\beta$  signaling. *Int. J. Cancer* 91:76-82, 2001
62. Lenferink AEG, Busse D, Flanagan WM, Yakes FM, **Arteaga CL**. ErbB2/*neu* kinase modulates cellular p27<sup>Kip1</sup> and cyclin D1 through multiple signaling pathways. *Cancer Res.* 61:6583-6591, 2001

63. Bakin AV, Rinehart CC, Tomlinson AK, **Arteaga CL**. p38 mitogen-activated protein kinase is required for transforming growth factor  $\beta$ -mediated fibroblastic transdifferentiation and cell migration. *J. Cell Science* 115:3193-3206, 2002
64. Shin I, Bakin AV, Rodeck U, Brunet A, **Arteaga CL**. Transforming growth factor  $\beta$  enhances epithelial cell survival via Akt-dependent regulation of FKHRL1. *Mol. Biol. Cell* 12:3328-3339, 2001
65. Adachi Y, Lee CT, Coffee K, Yamagata N, Ohm JE, Park KH, Dikov MM, Nadaf SR, **Arteaga CL**, Carbone DP. Effects of genetic blockade of the insulin-like growth factor receptor in human colon cancer cell lines. *Gastroenterology* 123:1191-1204, 2002
66. Moulder SL, Yakes FM, Muthuswamy S, Bianco R, Simpson JF, **Arteaga CL**. EGF receptor (HER1) tyrosine kinase inhibitor ZD1839 ('Iressa') inhibits HER2/*neu* (*erbB-2*)-overexpressing breast cancer cells *in vitro* and *in vivo*. *Cancer Res.* 61:8887-8895, 2001
67. Yakes FM, Chinratanalab W, Ritter CA, King W, Seelig S, **Arteaga CL**. Herceptin-induced inhibition of phosphatidylinositol-3 kinase and Akt is required for antibody-mediated effects on p27, cyclin D1, and antitumor action. *Cancer Res.* 61:4132-4141, 2002
68. Muraoka RS, Lenferink AEG, Law B, Hamilton E, Brantley DM, Roebuck LR, **Arteaga CL**. ErbB-2/*neu*-induced, cyclin D1-dependent transformation is accelerated in p27-haploinsufficient but impaired in p27-null mouse mammary epithelial cells. *Mol. Cell. Biol.* 22:2204-2219, 2002
69. Shin I, Yakes FM, Rojo F, Shin N-Y, Bakin AV, Baselga J, **Arteaga CL**. Akt/PKB mediates cell cycle progression by phosphorylation of p27<sup>Kip1</sup> on Thr<sup>157</sup> and modulation of its cellular localization. *Nature Med.* 8:1145-1152, 2002
70. Kurokawa H, **Arteaga CL**. Inhibition of erbB receptor (HER) tyrosine kinases as a strategy to abrogate antiestrogen resistance in human breast cancer. *Clin. Cancer Res.* 7:4436S-4442S, 2001
71. **Arteaga CL**. The epidermal growth factor receptor: From mutant oncogene in nonhuman cancers to therapeutic target in human neoplasia. *J. Clin. Oncol.* 19:32s-40s, 2001
72. Muraoka RS, Dumont N, Ritter CA, Dugger TC, Brantley DM, Chen J, Easterly E, Roebuck LR, Ryan S, Gotwals PJ, Kotliansky V, **Arteaga CL**. Blockade of transforming growth factor  $\beta$  inhibits mammary tumor cell viability, migration, and metastases. *J. Clin. Invest.* 109:1551-1559, 2002
73. Bianco R, Shin I, Ritter CA, Yakes FM, Basso A, Rosen N, Tsurutani J, Dennis PA, Mills GB, **Arteaga CL**. Loss of PTEN/MMAC1/TEP in EGF receptor-expressing tumor cells counteracts the anti-tumor action of EGFR tyrosine kinase inhibitors. *Oncogene* 22:2812-2822, 2003
74. Dumont N, Bakin AV, **Arteaga CL**. Autocrine transforming growth factor  $\beta$  signaling mediates Smad-independent motility in human cancer cells. *J. Biol. Chem.* 278:3275-3285, 2003
75. Kobie JJ, Wu RS, Kurt RA, Lou S, Adelman MK, Whitesell LJ, Ramanathapuram LV, **Arteaga CL**, Akporiaye ET. TGF $\beta$  inhibits the antigen-presenting functions and antitumor activity of dendritic cell vaccines. *Cancer Res.* 63:1860-1864, 2003
76. Yi JY, Hur KC, Lee E, Jin YJ, **Arteaga CL**, Son YS. TGF $\beta$ 1-mediated epithelial to mesenchymal transition is accompanied by invasion in the SiHa cell line. *Eur. J. Cell Biol.* 81:457-468, 2002

77. Dumont N, **Arteaga CL**. The tumor microenvironment: A potential arbitrator of the tumor suppressive and promoting actions of transforming growth factor  $\beta$ . *Differentiation* 70:574-582, 2002
78. Kurokawa H, **Arteaga CL**. ErbB (HER) receptors can abrogate antiestrogen action in human breast cancer cells by multiple signaling mechanisms. *Clin. Cancer Res.* 9:511s-515s, 2003
79. Ewan KB, Henshall-Powell RL, Ravani SA, Pajares MJ, **Arteaga CL**, Wartors R, Akhurst RJ, Barcellos-Hoff MH. Transforming growth factor- $\beta$ 1 mediates cellular responses to DNA damage *in situ*. *Cancer Res.* 62:5627-5631, 2002
80. **Arteaga CL**, Baselga J. Clinical trial design and endpoints for EGF receptor-targeted therapies: Implications for drug development and practice. *Clin. Cancer Res.* 9:1579-1589, 2003
81. Dumont N, **Arteaga CL**. A kinase inactive type II TGF $\beta$  receptor impairs BMP signaling in human breast cancer cells. *Biochem. Biophys. Res. Comm.* 301:108-112, 2003
82. Muraoka RS, Koh Y, Roebuck LR, Sanders ME, Brantley-Sieders D, Gorska AE, Moses HL, **Arteaga CL**. Increased malignancy of Neu-induced mammary tumors overexpressing active transforming growth factor  $\beta$ 1. *Mol. Cell. Biol.* 23:8691-8703. 2003
83. Dumont N, **Arteaga CL**. Targeting the transforming growth factor  $\beta$  signaling network in human neoplasia. *Cancer Cell* 3:531-536, 2003
84. Moulder SL, **Arteaga CL**. A phase I/II trial of trastuzumab and gefitinib in patients with metastatic breast cancer that overexpress HER2/*neu* (ErbB-2). *Clin. Breast Cancer* 4:142-145, 2003
85. Matheny KE, Barbieri CE, Snizek JC, **Arteaga CL**, Pietenpol JA. Inhibition of epidermal growth factor receptor signaling decreases p63 expression in head and neck squamous carcinoma cells. *Laryngoscope* 113:936-939, 2003
86. Brown KA, Roberts RL, **Arteaga CL**, Law BK. Transforming growth factor- $\beta$  induces Cdk2 relocalization to the cytoplasm coincident with dephosphorylation of retinoblastoma tumor suppressor protein. *Breast Cancer Res.* 6:R130-R139, 2004
87. Ueda Y, Wang E, Dumont N, Yi JY, Koh Y, **Arteaga CL**. Overexpression of HER2 (erbB2) in human breast epithelial cells unmasks TGF $\beta$ -induced motility. *J. Biol. Chem.* 279:24505-24513, 2004
88. Roberts RB, **Arteaga CL**, Threadgill DW. Modeling the cancer patient with genetically engineered mice: Prediction of toxicity from molecule-targeted therapies. *Cancer Cell* 5:115-120, 2004
89. Muraoka-Cook RS, Kurokawa H, Koh Y, Forbes JT, Barcellos-Hoff MH, Moody SE, Chodosh LA, **Arteaga CL**. Conditional overexpression of active transforming growth factor  $\beta$ 1 accelerates metastases of transgenic mammary tumors. *Cancer Res.* 64:9002-9011, 2004
90. Reyzer ML, Caldwell RL, Dugger TC, Forbes JT, Ritter CA, Guix M, **Arteaga CL**, Caprioli RM. Early changes in protein expression detected by mass spectrometry predict tumor response to molecular therapeutics. *Cancer Res.* 64:9093-9100, 2004

91. Ritter CA, Bianco R, Dugger TC, Forbes J, Qu S, Rinehart C, King W, **Arteaga CL**. Mechanisms of resistance development against trastuzumab (Herceptin) in an *in vivo* breast cancer model. *Int J Clin Pharmacol Ther* 42:642-643, 2004
92. Shin I, Rotty J, Wu F, **Arteaga CL**. Phosphorylation of p27<sup>Kip1</sup> on T157 interferes with its association with importin  $\alpha$  during G1 transition and prevent nuclear reentry. *J. Biol. Chem.* 280:6055-6063, 2005
93. Shin I, Edl J, Biswas S, Lin PC, Mernaugh R, **Arteaga CL**. Pro-apoptotic activity of cell-permeable anti-Akt single-chain antibodies. *Cancer Res.* 65:2815-2824, 2005
94. Wang SE, Wu F, Shin I, Qu S, **Arteaga CL**. TGF $\beta$ -Smad target gene protein tyrosine phosphatase receptor-type  $\kappa$  is required for TGF $\beta$  function. *Mol. Cell. Biol.* 25:4703-4715, 2005
95. Yi JY, Shin I, **Arteaga CL**. Type I transforming growth factor  $\beta$  receptor binds to and activates phosphatidylinositol-3 kinase. *J. Biol. Chem.* 280:10870-10876, 2005
96. Bakin AV, Stourman NV, Sekhar KR, Rinehart C, Yan X, Meredith MJ, **Arteaga CL**, Freeman ML. Smad3-ATF3 signaling mediates TGF $\beta$  suppression of genes encoding Phase II detoxifying proteins. *Free Radical Biol. Med.* 38:375, 2005
97. Cheng N, Bhowmick NA, Chytil A, Gorska AE, Brown KA, Muraoka R, **Arteaga CL**, Neilson EG, Hayward SW, Moses HL. Loss of TGF- $\beta$  type II receptor in fibroblasts promotes mammary carcinoma growth and invasion through upregulation of TGF- $\alpha$ , MSP-HGF-mediated signaling networks. *Oncogene* 24:5053-5068, 2005
98. Wu FY, Wang SE, Sanders ME, Shin I, Rojo F, Baselga J, **Arteaga CL**. Reduction of cytosolic p27<sup>Kip1</sup> inhibits cancer cell motility, survival, and tumorigenicity. *Cancer Res.* 66:2162-2172, 2006
99. Wang SE, Shin I, Wu FY, Friedman D, **Arteaga CL**. ErbB2/HER2 signaling to Rac1/Pak1 is temporally and spatially modulated by transforming growth factor  $\beta$ . *Cancer Res.* 66:9591-9600, 2006
100. Muraoka-Cook RS, Shin I, Yi JY, Roebuck LR, Easterly ME, Barcellos-Hoff MH, Zent R, **Arteaga CL**. Activated type I TGF $\beta$  receptor (Alk5) confers enhanced survival to mammary epithelial cells and accelerates mammary tumor progression. *Oncogene* 24:3408-3423, 2006
101. Wang SE, Narasanna A, Perez-Torres M, Xiang B, Wu FY, Yang S, Carpenter G, Gazdar AF, Muthuswamy AK, **Arteaga CL**. HER2/neu (ErbB2) kinase domain mutation results in constitutive phosphorylation and activation of HER2 and EGF receptors and resistance to EGFR tyrosine kinase inhibitors. *Cancer Cell* 10:25-38, 2006
102. Shin I, Miller T, **Arteaga CL**. ErbB receptor signaling and therapeutic resistance to aromatase inhibitors. *Clin. Cancer Res.* 12:1008s-1012s, 2006
103. Yang S, Qu S, Perez-Torres M, Sawai A, Rosen N, Solit DB, **Arteaga CL**. Association with HSP90 inhibits Cbl-mediated downregulation of mutant EGF receptors. *Cancer Res.* 66:6990-6997, 2006

104. Biswas S, Criswell T, Wang SE, **Arteaga CL**. Inhibition of TGF $\beta$  signaling in human cancer: Targeting a tumor suppressor network as a therapeutic strategy. *Clin Cancer Res.* 12:4142-4146, 2006
105. Perez-Torres M, Guix M, Gonzalez A, **Arteaga CL**. EGF receptor antibody downregulates mutant receptors and inhibits tumors expressing EGFR mutations. *J. Biol. Chem.* 281:40183-40192, 2006
106. Cornett DS, Mobley JA, Dias EC, Andersson M, **Arteaga CL**, Sanders ME, Caprioli R. A novel histology-directed strategy for MALDI-MS tissue profiling that improves throughput and cellular specificity in human breast cancer. *Mol. Cell. Proteomics* 5:1975-1983, 2006
107. Shin I, **Arteaga CL**. Expression of active Akt protects against tamoxifen-induced apoptosis in MCF-7 cells. *IUBMB Life* 58:664-669, 2006
108. Qu S, Rinehart C, Wu H-H, Wang SE, Carter B, Xin B, Kotlikoff M, **Arteaga CL**. Gene targeting of *ErbB3* using Cre-mediated unidirectional DNA inversion strategy. *Genesis* 44:477-486, 2006
109. Friedman DB, Wang SE, Whitwell CW, Caprioli RM, **Arteaga CL**. Multi-variable Difference Gel Electrophoresis and Mass Spectrometry: A Case Study on TGF $\beta$  and ErbB2 signaling. *Mol. Cell. Proteomics* 6:150-169, 2007
110. Wang SE, Narasanna A, Whitell CW, Wu FY, Friedman DB, **Arteaga CL**. Convergence of p53 and TGF $\beta$  signaling on activating expression of the tumor suppressor gene *maspin* in mammary epithelial cells. *J. Biol. Chem.* 282:5661-5669, 2007
111. Biswas S, Guix M, Rinehart C, Dugger TC, Chytil A, Moses HL, Freeman M, **Arteaga CL**. Inhibition of TGF $\beta$  with neutralizing antibodies prevents radiation-induced acceleration of metastatic cancer progression. *J. Clin. Invest.* 117: 1305-1313, 2007
112. Yang L, Amman JM, Kikuchi T, Porta R, Guix M, Gonzalez A, Billheimer D, **Arteaga CL**, Tai H, DuBois RN, Carbone DP, Johnson DH. Inhibition of EGFR signaling elevates 15-hydroxyprostaglandin dehydrogenase in non-small cell lung cancer. *Cancer Res.* 67:5587-5593, 2007
113. Bonine-Summers A, Brown KA, Aakre ME, **Arteaga CL**, Pietenpol JA, Moses HL, Cheng N. Epidermal growth factor receptors play a significant role in hepatocyte growth factor-mediated biological responses in mammary epithelial cells. *Cancer Biol. & Ther.* 6:561-570, 2007
114. Ritter CA, Perez-Torres M, Rinehart C, Guix M, Dugger TC, Engelman JA, **Arteaga CL**. Human breast cancer cells selected for resistance to trastuzumab *in vivo* overexpress EGFR and ErbB ligands and remain dependent on the ErbB receptor network. *Clin. Cancer Res.* 13:4909-4919, 2007
115. Yang S, Park P, Turkson J, **Arteaga CL**. Ligand-independent phosphorylation of Y869 (Y845) links mutant EGF receptor signaling to STAT-mediated gene expression. *Exp. Cell Res.* 314:413-419, 2008 PMC3221731
116. Hinow P, Wang SE, **Arteaga CL**, Webb GF. A mathematical model separates quantitatively the cytostatic and cytotoxic effects of a HER2 tyrosine kinase inhibitor. *Theor. Biol. Med. Model.* 4:14-24, 2007

117. Criswell T, **Arteaga CL**. Modulation of NF $\kappa$ B activity and E-cadherin by the type III TGF $\beta$  receptor regulates cell growth and motility. *J. Biol. Chem.* 282:32491-32500, 2007
118. Baselga J, Rothenberg ML, Tabernero J, Seoane J, Daly T, Cleverly A, Berry B, Rhoades SK, Ray CA, Fill J, Farrington DL, Wallace LA, Yingling JM, Lahn M, **Arteaga CL**, Carducci M. TGF- $\beta$  signaling related markers in cancer patients with bone metastases. *Biomarkers* 13:217-236, 2008 PMID: 18270872. PMC: N/A
119. Guix M, de Matos Granja N, Meszoely M, Adkins T, Wieman B, Frierson K, Sánchez V, Sanders ME, Grau AM, Mayer IA, Pestano G, Shyr Y, Muthuswamy S, Calvo B, Krontiras H, Krop I, Kelley MC, **Arteaga CL**. Short pre-operative treatment with erlotinib inhibits tumor cell proliferation in hormone receptor-positive breast cancers. *J. Clin. Oncol.* 26:897-906, 2008. PMID: 18180460. PMC: N/A
120. Sawai A, Chandarlapaty S, Greulich H, Gonen M, Ye Q, **Arteaga CL**, Sellers W, Rosen N, Solit DB. Inhibition of Hsp90 downregulates mutant EGFR expression and sensitizes EGFR-mutant tumors to paclitaxel. *Cancer Res.* 68:589-596, 2008. PMC4011195
121. Sanders ME, Dias EC, Xu BJ, Mobley JA, Billheimer D, Roder H, Grigorieva J, Dowsett M, **Arteaga CL**, Caprioli RM. Differentiating proteomics biomarkers in breast cancer by laser capture microdissection and MALDI mass spectrometry. *J. Proteome Res.* 7:1500-1507, 2008. PMC2738605
122. Belkhiri A, Dar AA, Peng D, Razvi MH, Rinehart C, **Arteaga CL**, El-Rifai W. Expression of t-DARPP mediates trastuzumab resistance in breast cancer cells. *Clin. Cancer Res.* 14:4564-4571, 2008. PMC2842884
123. Miller TW, Shin I, Kagawa N, Evans DB, Waterman MR, **Arteaga CL**. Aromatase is phosphorylated *in situ* at Serine 118. *J. Steroid Biochem. & Mol. Biol.* 112:95-101, 2008. PMC2856845
124. Criswell TL, Dumont N, Barnett JB, **Arteaga CL**. Knockdown of the transforming growth factor- $\beta$  type III receptor impairs motility and invasion of metastatic cancer cells. *Cancer Res.* 68:7304-7312, 2008. PMID: 18794117
125. Wang SE, Xiang B, Guix M, Olivares MG, Parker J, Chung CH, Pandiella A, **Arteaga CL**. Transforming growth factor  $\beta$  engages TACE and ErbB3 to activate phosphatidylinositol-3 kinase/Akt in ErbB2-overexpressing breast cancer and desensitizes cells to trastuzumab. *Mol. Cell. Biol.* 28:5605-5620, 2008. PMC2546920
126. Li L, Wang H, Yang ES, **Arteaga CL**, Xia F. Erlotinib attenuates homology-directed recombinational repair of chromosomal breaks in human breast cancer cells. *Cancer Res.* 68:9141-9146, 2008. PMC2586988
127. Guix M, Faber AC, Wang SE, Olivares MG, Song Y, Qu S, Rinehart C, Seidel B, Yee D, **Arteaga CL**, Engelman JE. Acquired resistance to EGFR tyrosine kinase inhibitors in cancer cells is mediated by loss of IGF-binding proteins. *J. Clin. Invest.* 118:2609-2619, 2008. PMC2430495
128. Calvo-Aller E, Baselga J, Glatt S, Cleverly A, Lahn M, **Arteaga CL**, Rothenberg ML, Carducci, MA. First human dose escalation study in patients with metastatic malignancies to determine



safety and pharmacokinetics of LY2157299, a small molecule inhibitor of the transforming growth factor-beta receptor I kinase. *J. Clin. Oncol.* 2008 May 20;26 (15\_suppl):14554

129. **Arteaga CL**, O'Neill A, Moulder SL, Pins M, Sparano JA, Sledge GW, Davidson NE. A phase I-II study of combined blockade of the ErbB receptor network with trastuzumab and gefitinib in patients with HER2-overexpressing breast cancer. *Clin. Cancer Res.* 14:6277-6283, 2008. PMC2925197
130. Anderson AR, Hassanein M, Branch KM, Lu J, Lobdell NA, Maier J, Basanta D, Weidow B, Narasanna A, **Arteaga CL**, Reynolds AB, Quaranta V, Estrada L, Weaver AM. Microenvironmental independence associated with tumor progression. *Cancer Res.* 69:8797-8806, 2009 PMC2783510
131. Kedrin D, Wyckoff J, Hynes NE, **Arteaga CL**, Segall JE. ErbB1 and ErbB2 have distinct functions in tumor cell invasion and intravasation. *Clin. Cancer Res.* 15:3733-3739, 2009. PMC2859965
132. Wang SE, Hinow P, Bryce N, Weaver AM, Estrada L, **Arteaga CL**, Webb GF. A mathematical model quantifies proliferation and motility effects of TGF- $\beta$  on cancer cells. *Comput. Math. Meth. Med.* 10:71-83, 2009. PMC4437567
133. Wang SE, Xiang B, Zent R, Quaranta V, Pozzi A, **Arteaga CL**. Transforming growth factor  $\beta$  induces clustering of HER2 and integrins by activating Src-FAK and receptor association to the cytoskeleton. *Cancer Res.* 69:475-482, 2009. PMC2629389
134. Miller TW, Pérez-Torres M, Narasanna A, Wu H, Guix M, Jiang A, Stål O, Pérez-Tenorio G, González-Angulo AM, Hennessy BT, Mills GB, Kennedy JP, Lindsley CW, Shyr Y, **Arteaga CL**. Loss of PTEN engages ErbB3 and IGF-I receptor signaling to promote antiestrogen resistance in breast cancer. *Cancer Res.* 69:4192-4201, 2009 PMC2724871
135. Virostko J, Xie J, Hallahan DE, **Arteaga CL**, Gore JC, Manning HC. A molecular imaging paradigm to rapidly profile response to angiogenesis-directed therapy in small animals. *Mol. Imaging Biol.* 11:204-212, 2009 PMC2677126
136. Shah C, Miller TW, Wyatt S, McKinley E, Olivares MG, Sanchez V, Nolting DD, Buck JR, Zhao P, Ansari MS, Baldwin RM, Gore JC, Schiff R, **Arteaga CL**, Manning HC. Molecular imaging biomarkers predict response to ant-HER2 (ErbB2) therapy in preclinical models of breast cancer. *Clin. Cancer Res.* 15:4712-4721, 2009 PMC2819132
137. Scott SA, Selvy PE, Buck JR, Cho HP, Criswell TL, Thomas AL, Armstrong MD, **Arteaga CL**, Lindsley CW, Brown HA. Design, synthesis, and biochemical characterization of isoform-selective phospholipase D inhibitors that modulate cancer cell invasiveness. *Nat. Chem. Biol.* 5:108-117, 2009 PMC3798018
138. Miller TW, Forbes JT, Shah C, Wyatt SK, Manning HC, Olivares MG, Sánchez V, Dugger TC, Narasanna A, Cook RS, Kennedy JP, Lindsley CW, **Arteaga CL**. Inhibition of mTOR is required for optimal antitumor effect of HER2 inhibitors against HER2-overexpressing cancer cells. *Clin. Cancer Res.* 15:7266-7276, 2009 PMC2787848

139. Brantley-Sieders K, Vaught D, Yu J, Xie L, Wells S, Jackson D, Muraoka-Cook R, **Arteaga CL**, Chen J. A determining role of the EphA2 receptor tyrosine kinase in resistance to trastuzumab therapy. *Cancer Res.* 70:299-308, 2010 PMC3859619
140. Wang SE, Yang Y, Criswell TL, DeBusk LM, Lin CP, Zent T, Ren X, **Arteaga CL**. HER2 kinase domain mutation regulate the tumor microenvironment through the induction of growth factors and angiogenic mediators. *Oncogene* 29:3335-3348, 2010. PMC2883631
141. Chakrabarty A, Rexer BN, Wang SE, Cook RS, Engelman JA, **Arteaga CL**. H1047R *PIK3CA* mutant enhances HER2-mediated transformation via heregulin production and activation of HER3. *Oncogene* 29:5193-5203, 2010 PMC2945381
142. Miller TW, Hennessy BT, González-Angulo AM, Fox EM, Mills GB, Ghazoui Z, Dunbier A, Anderson H, Dowsett M, Chen H, Higham C, García-Echeverría C, Shyr Y, **Arteaga CL**. Hyperactivation of phosphatidylinositol-3 kinase promotes escape from hormone-dependence in estrogen-receptor positive breast cancer. *J. Clin. Invest.* 120:2406-2413, 2010 PMC2898598
143. Bauer JA, Ye F, Marshall CB, Lehmann BD, Pendleton CS, Shyr Y, **Arteaga CL**, Pietenpol JA. RNAi screening approach identifies agents that enhance paclitaxel activity in breast cancer cells. *Breast Cancer Res.* 12(3):R41, 2010 PMC2917036
144. Rejniak KA, Wang SE, Bryce NS, Chang H, Parvin B, Jourquin J, Lourdes E, Gray JW, **Arteaga CL**, Weaver AM, Quaranta V, Anderson AR. Linking Changes in Epithelial Morphogenesis to Cancer Mutations Using Computational Modeling. *PLoS Comput. Biol.* 6(8). pii:e1000900, 2010 PMC2928778
145. Davé B, Migliaccio I, Gutiérrez MC, Wu M-F, Chamness GC, Wong H, Pavlick A, Narasanna A, Chakrabarty A, Hilsenbeck SG, Huang J, Rimawi M, Schiff R, **Arteaga CL**, Osborne CK, Chang JC. Loss of PTEN or PI3 kinase activation and response to trastuzumab or lapatinib in HER2 overexpressing locally advanced breast cancers. *J. Clin. Oncol.* 29:166-173, 2011. PMC3058274
146. Garrett JT, Olivares MG, Rinehart C, Granja-Ingram NM, Sánchez V, Chakrabarty A, Davé B, Cook RS, Pao W, McKienly ET, Manning HC, Chang JC, **Arteaga CL**. Transcriptional and post-translational upregulation of HER3 (ErbB3) compensates for inhibition of the HER2 tyrosine kinase. *Proc. Natl. Acad. Sci. USA* 108:5021-6, 2011 PMC3064360
147. Rexer BN, Ham AL, Rinehart C, Hill S, de Matos Granja-Ingram N, González-Angulo AM, Mills GB, Dave B, Chang JC, Liebler DC, **Arteaga CL**. Phosphoproteomic mass spectrometry profiling links Src family kinases to escape from HER2 tyrosine kinase inhibitors. *Oncogene* 30:4163-74, 2011 PMC3204390
148. Ghosh R, Narasanna A, Wang SE, Liu S, Chakrabarty A, Balko JM, González AM, Mills GB, Penuel A, Winslow J, Sperinde J, Dua R, Pidaparathi S, Mukherjee A, Leitzel K, Kostler W, Lipton A, Bates M, **Arteaga CL**. Trastuzumab has preferential activity against breast cancers driven by HER2 homodimers. *Cancer Res.* 71:1871-1882, 2011 PMC3221734
149. Cook RS, Garrett JT, Sánchez V, Stanford JC, Young C, Chakrabarty A, Rinehart C, Zhang Y, Wu Y, Greenberger LM, Horak ID, **Arteaga CL**. ErbB3 ablation impairs phosphatidylinositol 3-kinase (PI3K)/AKT-dependent mammary tumorigenesis. *Cancer Res.* 71:3941-51, 2011 PMC3204389

150. Miller TW, Balko JM, Ghazou Z, Dunbier A, Anderson H, Dowsett M, Miller WR, Wu H, Shyr Y, **Arteaga CL**. A gene signature from human breast cancer cell lines with acquired hormone independence identifies MYC as a mediator of antiestrogen resistance. *Clin. Cancer Res.* 17:2024-34, 2011 PMC3221728
151. Miller TW, Rexer RN, Garrett JT, **Arteaga CL**. Mutations in the phosphatidylinositol-3 kinase pathway: role in tumor progression and therapeutic implications in breast cancer. *Breast Cancer Res.* 13(6):224, 2011. PMC3315683
152. Miller TW, Fox EM, Balko JM, Ghazoui A, Dunbier A, Anderson H, Dowsett M, Jiang A, Smith RA, Sánchez V, Maira S-M, Manning HC, González-Angulo AM, Mills GB, Higham C, Ye F, Miller WR, Shyr Y, **Arteaga CL**. ER $\alpha$ -dependent E2F transcription can mediate resistance to estrogen deprivation in human breast cancer. *Cancer Discov.* 1:338-51, 2011 PMC3204388
153. Gluck S, **Arteaga CL**, Osborne CK. Optimizing chemotherapy-free survival for ER/HER2-positive metastatic breast cancer patients. *Clin. Cancer Res.* 17:559-61, 2011. PMID: 21764887
154. Yang X, Turke AB, Qi J, Song Y, Rexer BN, Miller TW, Jänne PA, **Arteaga CL**, Cantley LC, Engelman JA, Asara JM. Using tandem mass spectrometry in targeted mode to identify activators of class IA PI3K in cancer. *Cancer Res.* 71:5965-75, 2011 PMC3209668
155. Miller TW, Balko JM, **Arteaga CL**. The phosphatidylinositol-3 kinase and antiestrogen resistance in breast cancer. *J. Clin. Oncol.* 29:4452-61, 2011. PMC3221526
156. Fox EM, Miller TW, Balko JM, Kuba MG, Sánchez V, Smith RA, Liu S, González-Angulo AM, Mills GB, Ye F, Shyr Y, Manning HC, Buck E, **Arteaga CL**. A kinome-wide screen identifies the Insulin/IGF-I receptor pathway as a mechanism of escape from hormone dependence in breast cancer. *Cancer Res.* 71:6773-84, 2011 PMC3206206
157. Faber A, Corcoran RB, Ebi H, Sequist L, Waltman BA, Chung E, Incio J, Digumarthy S, Pollock S, Song Y, Lifshits E, Roberge S, Coffman EJ, Benes C, Gómez H, Baselga J, **Arteaga CL**, Rivera MN, Dias-Santagata D, Jain R, Engelman JA. BIM expression in treatment-naive cancers predicts responsiveness to kinase inhibitors. *Cancer Discov.* 4:352-65, 2011 PMC3229203
158. **Arteaga CL**, Sliwkowski MX, Osborne CK, Perez EA, Puglisi F, Gianni L. Treatment of HER2-positive breast cancer: Current status and future perspectives. *Nat. Rev. Clin. Oncol.* 9:16-32, 2011. PMID: 22124364
159. Chakrabarty A, Sánchez V, Kuba MG, Rinehart C, **Arteaga CL**. Feedback upregulation of HER3 (ErbB3) expression and activity attenuates antitumor action of phosphatidylinositol-3 kinase pathway inhibitors. *Proc. Natl. Acad. Sci. USA* 109:2718-23, 2012 PMC3286932
160. Turke AB, Song Y, Costa C, Cook RS, **Arteaga CL**, Asara JM, Engelman JA. MEK inhibition relieves a negative feedback on ERBB receptors activating PI3K/AKT signaling. *Cancer Res.* 72:3228-37, 2012 PMC3515079
161. Vaught DB, Stanford JC, Hicks DJ, Wheeler F, Rinehart C, Sánchez V, Muller WJ, **Arteaga CL**, Cook RS. HER3 is required for HER2-induced preneoplastic changes to the breast epithelium and tumor formation. *Cancer Res.* 72:2672-82, 2012 PMC3693553
162. Walsh A, Cook RS, Rexer B, **Arteaga CL**, Skala MC. Optical imaging of metabolism in HER2-overexpressing breast cancer cells. *Biomed. Opt. Express* 3:75-85, 2012 PMC3255344

163. Balko JM, Miller TW, Morrison MM, Hutchinson K, Young C, Rinehart C, Sánchez V, Jee D, Polyak K, Prat A, Perou CM, **Arteaga CL**, Cook RS. The receptor tyrosine kinase ErbB3 maintains the balance between luminal and basal breast epithelium. *Proc. Natl. Acad. Sci. USA* 109:221-6, 2012 PMC3252958
164. Balko JM, Cook RS, Vaught DB, Kuba MG, Miller TW, Bhola NE, Sanders ME, Granja-Ingram NM, Smith JJ, Meszoely IM, Salter J, Dowsett M, Stemke-Hale K, González-Angulo AM, Mills GB, Pinto JA, Gómez HL, **Arteaga CL**. Profiling of residual breast cancers after neoadjuvant chemotherapy identifies DUSP4 deficiency as a mechanism of drug resistance. *Nature Med.* 18:1052-9, 2012 PMC3693569
165. Fox EM, **Arteaga CL**, Miller TW. Abrogating endocrine resistance by targeting estrogen receptor (ER)  $\alpha$  and phosphatidylinositol-3 kinase (PI3K) in breast cancer. *Front. Oncol.* 2:145, 2012. doi: 10.3389/fonc.2012.00145 PMC3472546
166. Balko JM, Mayer IA, Sanders ME, Miller TW, Kuba MG, Wagle N, Garraway LA, **Arteaga CL**. Discordant cellular response to pre-surgical letrozole of bilateral synchronous ER-positive breast cancers with either a *K-RAS* mutation or *FGFR1* gene amplification. *Mol. Cancer Ther.* 11:2301-5, 2012 PMC3682668
167. Sangai T, Akcakanat A, Chen H, Tarco E, Wu Y, Do K-A, Miller TW, **Arteaga CL**, Mills GB, González-Angulo AM, Meric-Brenstam F. Allosteric Akt inhibitor MK-2206 has antitumor activity in cancer cells with PI3K pathway aberrations. *Clin. Cancer Res.* 18:5816-28, 2012 PMC3772348
168. Sprung RW, Martinez MA, Carpenter KL, Ham AL, Washington MK, **Arteaga CL**, Sanders ME, Liebler DC. Precision of multiple reaction monitoring mass spectrometry analysis of formalin-fixed, paraffin-embedded tissue. *J. Proteome Res.* 11:3498-3505, 2012 PMC3368395
169. Rexer BN, Ghosh R, Narasanna A, Estrada MV, Chakrabarty A, Song Y, Engelman JA, **Arteaga CL**. Human breast cancer cells harboring a T768M gatekeeper mutation in HER2 overexpress EGFR ligands and are sensitive to dual inhibition of EGFR and HER2. *Clin. Cancer Res.* 19:539-5401, 2013 PMC3809918
170. Chakrabarty A, Bhola NE, Sutton CR, Ghosh R, Kuba MG, Davé B, Chang JC, **Arteaga CL**. Trastuzumab-resistant breast cancer cells rely on a HER2-PI3K-FoxO-survivin axis and are sensitive to PI3K inhibitors. *Cancer Res.* 73:1190-200, 2013 PMC3563941
171. Bhola N, Balko JM, Dugger TC, Kuba MG, Stanford J, Cook RS, **Arteaga CL**. TGF $\beta$  inhibition enhances chemotherapy action against triple-negative breast cancer. *J. Clin. Invest.* 123:1348-58, 2013 PMC3582135
172. Garrett JT, Sutton CR, Kuba MG, Cook RS, **Arteaga CL**. Dual blockade of HER2 in HER2-overexpressing tumor cells does not completely eliminate HER3 function. *Clin. Cancer Res.* 19:610-9, 2013 PMC3563762
173. Fox EM, Kuba MG, Miller TW, Davies BR, **Arteaga CL**. Autocrine IGF/insulin receptor axis compensates for inhibition of AKT in ER positive breast cancer cells with acquired resistance to estrogen deprivation. *Breast Cancer Res.* 2013 Jul 11; 15(4):R55 [Epub ahead of print] PMC3979036

174. Hanker AB, Pfefferle A, Balko JM, Kuba MG, Young CD, Sánchez V, Sutton CR, Cheng H, Perou CM, Zhao JJ, Cook RS, **Arteaga CL**. Mutant PIK3CA accelerates HER2-driven transgenic mammary tumors and induces resistance to combinations of anti-HER2 therapies. *Proc. Natl. Acad. Sci. USA* 110:14372-7, 2013 PMC3761610
175. Young CD, Pfefferle AD, Owens P, Kuba MG, Rexer BN, Balko JM, Sánchez V, Cheng H, Perou CM, Zhao JJ, Cook RS, **Arteaga CL**. Conditional loss of ErbB3 delays mammary gland hyperplasia induced by mutant PIK3CA without affecting mammary tumor latency, gene expression or signaling. *Cancer Res.* 73:4075-85, 2013 PMC3702683
176. Walsh AJ, Cook RS, Manning HC, Hicks DJ, Lafontant A, **Arteaga CL**, Skala MC. Optical metabolic imaging identifies glycolytic levels, sub-types and early treatment response in breast cancer. *Cancer Res.* 73:6164-74, 2013 PMC3801432
177. Balko JM, Schwarz LJ, Bholra N, Kurupi R, Owens P, Miller TW, Gómez H, Cook RS, **Arteaga CL**. Activation of MAPK pathways via DUSP4 loss promotes cancer stem cell-like phenotypes in basal-like breast cancer. *Cancer Res.* 73:5346-58, 2013 PMC4090144
178. Ciruelos E, Cortés-Funes H, Ghanem I, Manso L, **Arteaga CL**. Role of inhibitors of mammalian target of rapamycin in the treatment of luminal breast cancer. *Anticancer Drugs* 24(8):769-80, 2013. PMID: 23838677. PMC: N/A
179. Garrett JT, Sutton CR, Kurupi R, Bialucha CU, Ettenberg SA, Collins SD, Sheng Q, Wallweber J, DeFazio-Eli L, **Arteaga CL**. Combination of antibody that blocks ligand-independent HER3 dimerization and a p110 $\alpha$  inhibitor potently block PI3K signaling and growth of HER2-overexpressing breast cancers. *Cancer Res.* 73:6013-23, 2013 PMC3790862
180. Garner AP, Bialucha CU, Sprague ER, Garrett JT, Sheng Q, Li S, Sineshchekova O, Saxena P, Sutton CR, Chen D, Chen Y, Wang H, Liang J, Das R, Mosher R, Haubst N, Zehetmeier C, Harberl M, Kunz C, Elis W, Heidt AB, Herlihy K, Murtie J, **Arteaga CL**, Sellers WR, Ettenberg SA. LJM716, an anti-HER3 antibody that locks HER3 in the inactive conformation, inhibits both HER2 and heregulin-driven tumor growth. *Cancer Res.* 73:6024-35, 2013 PMC3924863
181. Dennison JB, Molina JR, Mitra S, González-Angulo AM, Balko JM, Kuba MG, Sanders ME, Pinto JA, Gómez HL, **Arteaga CL**, Brown RE, Mills GB. Lactate Dehydrogenase B: A metabolic marker of response to neoadjuvant chemotherapy in breast cancer. *Clin. Cancer Res.* 19:3703-13, 2013 PMC3727144
182. Morrison MM, Hutchinson K, Williams M, Stanford JC, Balko JM, Young C, Kuba MG, Sánchez A, Hicks DJ, **Arteaga CL**, Prat A, Perou CM, Earp HS, Massarweh S, Cook RS. ErbB3 downregulation enhances luminal breast tumor response to antiestrogens. *J. Clin. Invest.* 123:4329-43, 2013 PMC3784526
183. Balko JM, Giltnane JM, Schwarz LJ, Young CD, Cook RS, Owens P, Sanders ME, Kuba MG, Sánchez V, Pinto JA, Doimi F, Gómez H, Goga A, Lehmann B, Bauer J, Pietenpol JA, Stephens PA, Cronin M, Miller VA, Yelensky R, Wang K, Palmer G, **Arteaga CL**. Molecular profiling of drug-resistant tumor cells remaining in the breast after neoadjuvant chemotherapy of triple-negative breast cancers identifies actionable therapeutic targets. *Cancer Discov.* 4:232-45, 2014 PMC3946308

184. Jeselsohn R, Yelensky R, Buchwalter G, Frampton G, Meric-Bernstam F, González-Angulo AM, Ferrer-Lozano J, Pérez-Fidalgo JA, Cristofanilli M, Gómez H, **Arteaga CL**, Giltane J, Balko JM, Cronin MT, Jarosz M, Sun J, Hawryluk M, Lipson D, Otto G, Ross JS, Dvir A, Soussan-Gutman L, Wolf I, Rubinek T, Gilmore L, Schnitt S, Come SE, Pusztai L, Stephens P, Brown M, Miller VA. Emergence of constitutively active estrogen receptor- $\alpha$  mutations in pretreated advanced estrogen receptor positive breast cancer. *Clin. Cancer Res.* 20:1757-67, 2014 PMC3998833
185. Lehmann BD, Bauer JA, Schafer JM, Pendleton CS, Tang L, Johnson KC, Chen X, Balko JM, Gómez HL, **Arteaga CL**, Mills GB, Sanders ME, Pietenpol JA. PIK3CA mutations in AR-positive triple negative breast cancer confer sensitivity to the combination of PI3K and AR inhibitors. *Breast Cancer Res.* 2014 Aug 8;16(4):406 [Epub ahead of print] PMC4187324
186. Bi X, Rexer BN, **Arteaga CL**, Guo M, Mahadevan-Jansen A. Evaluating HER2 Amplification Status and Acquired Drug Resistance in Breast Cancer Cells Using Raman Spectroscopy. *J. Biomed. Optics* 2014 Feb 1;19(2):25001. doi: 10.1117/1.JBO.19.2.025001 PMC3913568
187. Rexer BN, Chanthaphaychith S, Dahlman KB, **Arteaga CL**. Direct inhibition of PI3K in combination with dual HER2 inhibitors is required for optimal antitumor activity in HER2+ breast cancer cells. *Breast Cancer Res.* 2014 Jan 23;16(1):R9. doi: 10.1186/bcr3601 PMC3978602
188. Mayer IA, Abramson VG, Isakoff SJ, Forero-Torres A, Balko JM, Kuba MG, Sanders ME, Yap J, Van den Abbeele AD, Li Y, Cantley LC, Winer E, **Arteaga CL**. Stand Up to Cancer Phase Ib Study of Pan-Phosphoinositide-3-Kinase Inhibitor Buparlisib With Letrozole in Estrogen Receptor-Positive/Human Epidermal Growth Factor Receptor 2-Negative Metastatic Breast Cancer. *J. Clin. Oncol.* 32:1202-9, 2014 PMC3986383
189. **Arteaga CL**, Engelman JA. ERBB receptors: From oncogene discovery to basic science to mechanism-based cancer therapeutics. *Cancer Cell* 25:282-303, 2014 PMC4018830
190. Johnson DB, Dahlman KH, Knol J, Gilbert J, Puzanov I, Means-Powell J, Balko JM, Lovly CM, Murphy BA, Goff LW, Abramson VG, Crispens MA, Mayer IA, Berlin JD, Horn L, Keedy VL, Reddy NM, **Arteaga CL**, Sosman JA, Pao W. Enabling a genetically informed approach to cancer medicine: a retrospective evaluation of the impact of comprehensive tumor profiling using a targeted next-generation sequencing panel. *Oncologist* 19:616-22, 2014 PMC4041676
191. Liu S, Meng X, Chen H, Liu W, Miller T, Murph M, Lu Y, Zhang F, Iurascu MG, **Arteaga CL**, Mills GB, Meric-Bernstam F, González-Angulo AM. Targeting tyrosine kinases and estrogen receptor abrogates resistance to endocrine therapy in breast cancer. *Oncotarget* 2014 Oct 15;5(19):9049-64. PMC4253418
192. Walsh AJ, Cook RS, Sanders ME, Aurisicchio L, **Arteaga CL**, Skala MC. Quantitative optical imaging of primary tumor organoid metabolism predicts drug response in breast cancer. *Cancer Res.* 74:1-11, 2014 PMC4167558
193. Whisenant JG, McIntyre JO, Peterson TE, Kang H, Sánchez V, Manning HC, **Arteaga CL**, Yankeelov TE. Utility of  $^{18}\text{F}$ FLT-PET to assess treatment response in trastuzumab-resistant and trastuzumab-sensitive HER2-overexpressing human breast cancer xenografts. *Mol. Imaging Biol.* 2014 Jul 18 [Epub ahead of print] PMC4311727

194. Abramson VG, Lloyd MC, Ballinger T, Sanders ME, Du L, Kuba MG, Lai D, Su Z, Mayer IA, Levy M, LaFrance DR, Vnencak-Jones CL, Shyr Y, Dahlman KB, Pao W, **Arteaga CL**. Characterization of breast cancers with PI3K mutations in an academic practice setting using SNaPshot profiling. *Breast Cancer Res & Treat* 145:389-99, 2014 PMC4046906
195. McCormack DR, Walsh AJ, Sit W, **Arteaga CL**, Chen J, Cook RS, Skala MC. *In vivo* hyperspectral imaging of microvessel response to trastuzumab treatment in breast cancer xenografts. *Biomed Optics Express* 5:2247-61, 2014 PMC4102362
196. Ju J-H, Oh S, Lee KM, Yang W, Nam KS, Moon HG, Noh D-Y, Kim CG, Park G, Park JB, Lee T, **Arteaga CL**, Shin I. Cytokeratin19 Induced by HER2/ERK Binds and Stabilizes HER2 on Cell Membranes. *Cell Death Diff.* 22:665-76, 2014 PMID 25342465
197. Schwarz LJ, Fox EM, Balko JM, Garrett JT, Kuba MG, Estrada MV, González-Angulo AM, Mills GB, Red-Brewer M, Mayer IA, Abramson V, Rizzo M, Kelley MC, Meszoely IM, **Arteaga CL**. LYN-activating mutations mediate antiestrogen resistance in estrogen receptor-positive breast cancer. *J. Clin. Invest.* 124:5490-502, 2014 PMC4348968 PMID 25401474
198. Dillon LM, Bean JR, Yang W, Shee K, Symonds LK, Balko JM, McDonald W, Liu S, González-Angulo AM, Mills GB, **Arteaga CL**, Miller TW. P-REX1 creates a positive feedback loop to activate growth factor receptor, PI3K/AKT and MEK/ERK signaling in breast cancer. *Oncogene* 34:3968-76, 2015 PMC4387124 PMID 25284585
199. Bhola NE, Jansen VM, Bafna S, Giltnane JM, Balko JM, Estrada MV, Meszoely I, Mayer I, Abramson V, Ye F, Sanders M, Dugger TC, Allen EV, **Arteaga CL**. Kinome-wide functional screen identifies role of PLK1 in hormone-independent, ER-positive breast cancer. *Cancer Res.* 75:405-14, 2015 PMID 25480943
200. Abramson RG, McGhee CR, Lakomkin N, **Arteaga CL**. Pitfalls in RECIST data extraction for clinical trials: Beyond the basics. *Acad. Radiol.* 22:779-86, 2015. PMC4429002
201. Lin NU, Guo H, Yap J, Mayer IA, Falkson CI, Hobday TJ, Dees EC, Richardson AL, Nanda R, Rimawi MF, Ryabin N, Najita J, Barry WT, **Arteaga CL**, Wolff AC, Krop IE, Winer EP, Van den Abbeele AD. Phase II Study of lapatinib in combination with trastuzumab in patients with HER2-positive, metastatic breast cancer: Clinical outcomes and predictive value of early [18F]fluorodeoxyglucose positron emission tomography imaging (TBCRC 003). *J. Clin. Oncol.* 33:2623-31, 2015
202. Walsh AJ, Cook RS, Lee JH, **Arteaga CL**, Skala MC. Collagen density and alignment in responsive and resistant trastuzumab-treated breast cancer xenografts. *J. Biomed. Opt.* 2015 Feb 1; 20(2):26004. doi: 10.1117/1.JBO.20.2.026004 PMC4335617
203. Castañeda CA, López-Ilasaca M, Pinto JA, Chirinos-Arias M, Doimi F, Neciosup SP, Rojas KI, Vidaurre T, Balko JM, **Arteaga CL**, Gómez HL. PIK3CA mutations in Peruvian patients with HER2-amplified and triple negative non-metastatic breast cancers. *Hematol. Oncol. Stem Cell Ther.* 2014 Dec; 7(4):142-8. doi: 10.1016/j.hemonc.2014.09.007. Epub 2014 Oct 29. PMID: 25467032. PMC: N/A
204. Young CD, Zimmerman LJ, Hanker AB, Hoshino K, Dave B, Gatza ML, Morrison MM, Formisano L, Whitwell CA, Bhola NE, Stricker T, Patel P, Brantley-Sieders DM, Perou CM, Park BH, Weaver AM, Chang JC, Liebler DC, Cook RS, **Arteaga CL**. Activating *PIK3CA* mutations

- induce an EGFR/ERK paracrine signaling axis in basal-like breast cancer. *Mol. Cell Proteomics* 14:1959-76, 2015. PMID: 25953087
205. Mayer IA, **Arteaga CL**. The phosphoinositide 3-kinase (PI3K)/AKT pathway as a target for cancer treatment. *Ann. Rev. Med.* 67:11-28, 2015. PMID 26473415
  206. Janiszewska M, Liu L, Almendro V, Kuang Y, Paweletz C, Sakr RA, Weigelt B, Hanker AB, Chandarlapaty S, King TA, Reis-Filho JS, **Arteaga CL**, Park SY, Michor F, Polyak K. The clinical impact of intratumor heterogeneity for *PIK3CA* mutation and *HER2* amplification in *HER2+* breast cancer assessed by *in situ* single cell analysis. *Nat. Genet.* 47:1212-9, 2015 PMID 26301495
  207. Cheng H, Liu P, Ohlson C, Xu E, Symonds L, Isabella A, Muller WJ, Lin NU, Krop IE, Roberts TM, Winer EP, **Arteaga CL**, Zhao JJ. *PIK3CA*<sup>H1047R</sup> and *HER2* initiated mammary tumors escape PI3K dependence by compensatory activation of MEK-ERK signaling. *Oncogene* 2015 Dec 7. doi: 10.1038/onc.2015.377 [Epub ahead of print]
  208. Zabransky DJ, Yankaskas CL, Cochran RL, Wong HY, Croessmann S, Chu D, Kavuri SM, Red-Brewer M, Rosen DM, Dalton WB, Cimino-Matthews A, Cravero K, Button B, Kyker-Snowman K, Cidado J, Erlanger B, Parsons H, Manto KM, Bose R, Lauring J, **Arteaga CL**, Konstantopoulos K, Park BH. *HER2* missense mutations have distinct effects on oncogenic signaling and migration. *Proc. Natl. Acad. Sci. USA* 112:E6205-14, 2015. PMID: 26526693
  209. Young CD, **Arteaga CL**, Cook RS. Dual inhibition of type I and type III PI3 kinases increases tumor cell apoptosis in *HER2+* breast cancers. *Breast Cancer Res.* 2015 Dec 4;17:148 doi: 10.1186/s13058-015-0656-62
  210. Bhola NE, Jansen VM, Koch JP, Li H, Formisano L, Williams JA, Grandis JR, **Arteaga CL**. Treatment of triple negative breast cancer with TORC1/2 inhibitors sustains a drug-resistant and Notch-dependent cancer stem cell population. *Cancer Res.* 76:440-52, 2016. PMID: 26676751
  211. Zhao J, Cheng F, Wang Y, **Arteaga CL**, Zhao Z. Systematic prioritization of druggable mutations in ~5,000 tumor genomes across 16 cancer types using a structural genomics-based approach. *Mol. Cell Proteomics* 15:642-56, 2016
  212. Walsh AJ, Cook RS, Sanders ME, **Arteaga CL**, Skala MC. Drug response in organoids generated from frozen primary tumor tissues. *Sci. Reports* 2016 Jan 7;6:18889 doi: 10.1038/srep18889
  213. Loi S, Dushyanthen S, Beavis PA, Salgado R, Denkert C, Savas P, Combs S, Rimm DL, Giltnane JM, Estrada MV, Sánchez V, Sanders ME, Cook RS, Pilkinton MA, Mallal SA, Wang K, Miller VA, Stephens PJ, Yelensky R, Doimi FD, Gómez H, Ryzhov SV, Darcy PK, **Arteaga CL**, Balko JM. *RAS*/MAPK activation is associated with reduced tumor-infiltrating lymphocytes in triple-negative breast cancer: Therapeutic cooperation between MEK and PD-1/PD-L1 immune checkpoint inhibitors. *Clin. Cancer Res.* 22:1499-509, 2016. PMID: 26515496
  214. Mayer IA, Abramson VG, Estrada MV, Sanders ME, Formisano L, Balko JM, Juric D, Solit D, Berger MF, Won HH, Li Y, Cantley LC, Winer E, **Arteaga CL**. Phase Ib study of alpelisib (BYL719, a PI3K $\alpha$ -specific inhibitor) with letrozole in ER+/HER2-negative metastatic breast cancer. *Clin. Cancer Res.* 2016 Apr 28. pii: clincanres.0134.2016 [Epub ahead of print]



215. Balko JM, Schwarz LJ, Cook RS, Estrada MV, Giltneane JM, Sanders ME, Sánchez V, Wang K, Combs S, Hicks D, Pinto JA, Landis MD, Chang JC, Doimi FD, Gómez H, Rimm DL, Yelensky R, Miller VA, Stephens PJ, **Arteaga CL**. Triple negative breast cancers with amplifications of JAK2 at the 9p24 loci exhibit JAK2-specific dependence. *Sci. Transl. Med.* 2016 Apr 13;8(334):334ra53 doi: 10.1126/scitranslmed.aad3001
216. Joseph JD, Darimont B, Zhou W, Arrazate A, Walter K, Blake RA, Nonomiya J, Guan Z, Young A, Kategaya L, Govek SP, Lai AG, Kahraman M, Brigham D, Sensintaffar J, Lu N, Shao G, Qian J, Grillot K, Moon M, Prudente R, Bischoff E, Lee K-J, Bonnefous C, Douglas KL, Julien JD, Nagasawa JY, Aparicio A, Kaufman J, Haley B, Wertz IE, Lackner MR, Nannini MA, Sampath D, Schwarz L, Manning HC, Tantawy MN, **Arteaga CL**, Heyman RA, Rix PJ, Friedman L, Smith ND, Metcalf C, Hager JH. The selective estrogen receptor downregulator GDC-0810 is efficacious in diverse models of ER+ breast cancer. *eLife* 2016 Jul 13;5. pii: e15828. doi: 10.7554/eLife.15828. PMID: 27410477
217. Cheng F, Zhao J, Hanker AB, Red-Brewer M, **Arteaga CL**, Zhao Z. Transcriptome and proteome-oriented identification of dysregulated eIF4G, STAT3, and Hippo pathways altered by PIK3CA<sup>H1047R</sup> in HER2/ER-positive breast cancer. *Breast Cancer Res. Treat.* 160:457-474, 2016
218. Hortobagyi G, Stemmer S, Burris HA, Yap YS, Sonke G, Paluch-Shimon S, Campone M, Blackwell KL, André F, Winer EP, Janni W, Verma S, Conte P, **Arteaga CL**, Cameron DA, Petrakova K, Hart LL, Villanueva C, Chan A, Jakobsen E, Nusch A, Burdaeva O, Grischke E-M, Alba Conejo E, Wist E, Marschner M, Favret AM, Yardley D, Bachelot T, Tseng L-M, Blau S, Xuan F, Souami F, Miller M, Germa C, Hirawat S, O'Shaughnessy J. Ribociclib as first-line therapy in hormone receptor-positive, advanced breast cancer. *N. Engl. J. Med.* 2016 Nov 3;375 (18):1738-1748. Epub 2016 Oct 7
219. Abramson VG, Ballinger T, Supko JG, Shapiro GI, **Arteaga CL**. Phase Ib study of safety and pharmacokinetics of the PI3K inhibitor SAR245408 in combination with the HER3 neutralizing antibody SAR256212 in patients with solid tumors. *Clin. Cancer Res.* 2016 Dec 28. pii: clincanres.1764.2016. doi: 10.1158/1078-0432.CCR-16-1764. [Epub ahead of print]
220. Wang Y, Ayres K, Goldman DA, Bardia A, Dickler M, Mayer IA, **Arteaga CL**, Baselga J, Manning HC, Mahmood U, Ulaner GA. <sup>18</sup>F-fluoroestradiol (FES) PET/CT measurement of estrogen receptor (ER) suppression during a phase I dose escalation trial of the novel ER-targeted therapeutic GDC-0810: Using an imaging biomarker to guide drug dosage in subsequent trials. *Clin. Cancer Res.* 2016 Dec 23. doi: 10.1158/1078-0432.CCR-16-2197. [Epub ahead of print]
221. Jovanovic B, Mayer IA, Mayer EL, Abramson VG, Bardia A, Sanders ME, Kuba MG, Estrada MV, Beeler JS, Shaver TM, Dillon PM, Forero-Torres A, Chang JC, Meszoely IM, Grau AM, Shyr Y, Sheng Q, Chen S-C, **Arteaga CL**, Pietenpol JA. A randomized phase II neoadjuvant study of cisplatin, paclitaxel with or without everolimus in patients with stage II/III triple-negative breast cancer (TNBC): Responses and long-term outcome correlated with increased frequency of DNA damage response gene mutations, TNBC subtype, AR status and Ki67. *Clin. Cancer Res.* 2017 Mar 7. pii: clincanres.3055.2016. doi: 10.1158/1078-0432.CCR-16-3055. [Epub ahead of print]

222. Polosukhina D, Love HD, Correa H, Su Z, Dahlman KB, Pao W, Moses HL, **Arteaga CL**, Lovvorn III HN, Zent R, Clark PE. Functional K-RAS mutations in Wilms Tumors. *Mol. Oncol.* 2017 Feb 11. doi: 10.1002/1878-0261.12044. [Epub ahead of print]
223. Jansen VM, Bhola NE, Bauer JA, Formisano L, Lee K-m, Hutchinson KE, Witkiewicz A, Moore PD, Estrada MV, Sánchez V, Sanders ME, Pohlmann PR, Pishvaian MJ, Riddle DA, Dugger TC, Wei W, Knudsen ES, **Arteaga CL**. RNA interference kinome-wide screen reveals a novel role for PDK1 in acquired resistance to CDK4/6 inhibition in ER-positive breast cancer. *Cancer Res.* 2017 Mar 1. pii: canres.2653.2016. doi: 10.1158/0008-5472.CAN-16-2653. [Epub ahead of print]
224. Hanker AB, Red-Brewer M, Sheehan JH, Koch JP, Sliwoski GR, Nagy R, Lanman R, Berger MF, Hyman DM, Solit DB, He J, Miller V, Cutler RE, Lalani AS, Cross D, Lovly CM, Meiler J, **Arteaga CL**. An acquired HER2 T798I gatekeeper mutation induces resistance to neratinib in a patient with HER2 mutant-driven breast cancer. *Cancer Discov.* 2017 Mar 8. pii: CD-16-1431. doi: 10.1158/2159-8290.CD-16-1431 [Epub ahead of print]
225. Hanker AB, Estrada VM, Bianchini G, Moore PD, Zhao J, Cheng F, Koch JP, Gianni L, Tyson D, Sánchez V, Rexer BN, Sanders ME, Zhao Z, Stricker TP, **Arteaga CL**. Extracellular matrix (ECM)/integrin signaling promotes resistance to the combination of HER2 and PI3K inhibitors in HER2+ breast cancer. *Cancer Res.* 2017 Apr 10. pii: canres.2808.2016. doi: 10.1158/0008-5472.CAN-16-2808. [Epub ahead of print]
226. Schwarz LJ, Hutchinson KE, Rexer BN, Estrada MV, González-Ericsson PI, Sanders ME, Dugger TC, Formisano L, Guerrero-Zotano AL, Red-Brewer M, Young CD, Lantto J, Pedersen MW, Kragh M, Horak I, **Arteaga CL**. An ERBB1-3 neutralizing antibody mixture with high activity against drug-resistant HER2+ breast cancers with ERBB ligand overexpression. *J. Natl. Cancer Inst.* 2017 Nov 1;109(11). doi: 10.1093/jnci/djx065
227. Hanker AB, Garrett JT, Estrada MV, Moore PD, Langley E, Singh S, Kim PS, Frampton G, Sanford E, Owen P, Becker J, Groseclose MR, Castellino S, Heikki J, Huober J, Brase JC, Majjaj S, Brohée S, Venet D, Brown V, Baselga J, Piccart M, Sotiriou C, **Arteaga CL**. HER2-overexpressing breast cancers amplify FGFR signaling upon acquisition of resistance to dual therapeutic blockade of HER2. *Clin. Cancer Res.* 2017 Apr 5. pii: clincanres.2287.2016. doi: 10.1158/1078-0432.CCR-16-2287. [Epub ahead of print]
228. Baselga J, Im S-A, Iwata H, Cortés J, De Laurentiis M, Jiang Z, **Arteaga CL**, Jonat W, Clemons M, Ito Y, Awada A, Chia S, Jagiełło-Gruszfeld A, Pistilli B, Tseng L-M, Hurvitz S, Masuda N, Takahashi M, Vuylsteke P, Hachemi S, Dharan B, Di Tomaso E, Urban P, Massacesi C, Campone M. Buparlisib in postmenopausal, hormone receptor-positive advanced breast cancer. *Lancet Oncol.* 2017 May 30. pii: S1470-2045(17)30376-5. doi: 10.1016/S1470-2045(17)30376-5. [Epub ahead of print] PMID: 28576675
229. Guerrero-Zotano AL, **Arteaga CL**. Neoadjuvant trials in estrogen receptor-positive breast cancer: A tool for acceleration of drug development and discovery. *Cancer Discov.* 2017 Jun;7(6):561-574. doi: 10.1158/2159-8290.CD-17-0228. Epub 2017 May 11. PMID: 28495849
230. Kodack DP, Askoxylakis V, Ferraro GB, Sheng Q, Badeaux M, Goel S, Qi X, Shankaraiah R, Cao ZA, Bezwada D, Patel B, Song Y, Ramjiawan RR, Das R, Tam A, Tanboon J, Duda DG, Miller CR, Siegel MB, Anders CK, Sanders M, Estrada MV, Shlegel R, **Arteaga CL**, Brachtel E, Huang A, Fukumura D, Engelman JE, Jain RK. The brain microenvironment mediates resistance

- to PI3K inhibition through the NRG-HER3 axis. *Sci. Transl. Med.* 2017 May 24;9(391). pii: eaal4682. doi: 10.1126/scitranslmed.aal4682. PMID: 28539475
231. Formisano L, Stauffer Km, Young CD, Bhola NE, Jansen VM, Guerrero AL, Jansen VM, Estrada MV, Hutchinson KE, Giltane JM, Schwarz LJ, Lu Y, Balko JM, Deas O, Cairo S, Judde J-G, Mayer IA, Sanders ME, Dugger TC, Bianco R, Stricker TP, **Arteaga CL**. Association of FGFR1 with ER $\alpha$  maintains ligand independent ER transcription and mediates resistance to estrogen deprivation in breast cancer. *Clin. Cancer Res.* 2017 Oct 15;23(20):6138-6150. doi: 10.1158/1078-0432.CCR-17-1232. Epub 2017 Jul 27 PMID 28751448
  232. Giltane JM, Hutchinson KE, Stricker TP, Formisano L, Young CD, Estrada MV, Nixon MJ, Du L, Sánchez V, Gonzalez-Ericsson P, Kuba MG, Sanders ME, Mu XJ, Van Allen EM, Wagle N, Mayer IA, Abramson VG, Gómez H, Rizzo M, Toy W, Chandarlapaty S, Mayer EL, Christiansen J, Murphy D, Fitzgerald K, Wang K, Ross JS, Miller VA, Stephens PJ, Yelensky R, Garraway L, Meszoely I, Balko JM, **Arteaga CL**. Genomic profiling of ER+ breast cancers after short term estrogen suppression reveals alterations associated with endocrine resistance. *Sci. Transl. Med.* 2017 Aug 9; 9(402). pii: eai7993. doi: 10.1126/scitranslmed.aai7993. PMID 28794284
  233. Limoge M, Safina A, Truskinovsky AM, Aljahdali I, Zonneville J, Gruevski A, **Arteaga CL**, Bakin AV. Tumor p38MAPK signaling enhances breast carcinoma vascularization and growth by promoting expression and deposition of pro-tumorigenic factors. *Oncotarget* 2017 Jun 28. doi: 10.18632/oncotarget.18755. [Epub ahead of print]
  234. Lee K-m, Giltane JM, Balko, JM, Schwarz LJ, Guerrero AL, Hutchinson KE, Nixon MJ, Estrada MV, Sánchez V, Sanders ME, Lee T, Gómez H, Lluch A, Pérez-Fidalgo JA, Fesik SW, **Arteaga CL**. MYC and MCL1 cooperatively promote chemotherapy-resistant breast cancer stem cells through regulation of mitochondrial oxidative phosphorylation. *Cell Metabolism* 2017 Oct 3;26(4):633-647.e7. doi: 10.1016/j.cmet.2017.09.009
  235. Croessmann S, Sheehan JH, Lee K-m, Sliwoski G, He J, Nagy R, Riddle D, Leelatian N, Mayer IA, Irish J, Balko JM, Lanman R, Miller V, Cantley LC, Meiler J, **Arteaga CL**. *PIK3CA* C2 domain deletions hyperactivate phosphoinositide 3-kinase (PI3K), generate oncogene dependence and are exquisitely sensitive to PI3K $\alpha$  inhibitors. *Clin. Cancer Res.* 2018 Mar 15;24(6):1426-1435. doi: 10.1158/1078-0432.CCR-17-2141. Epub 2017 Dec 28
  236. O'Shaughnessy J, Petrakova K, Sonke GS, Conte P, **Arteaga CL**, Cameron DA, Hart LL, Villanueva C, Jakobsen E, Beck JT, Lindquist D, Souami F, Mondal S, Germa C, Taran T, Hortobagyi GN. Ribociclib plus letrozole in patients with *de novo* HR+, HER2– advanced breast cancer: Subgroup analysis from the MONALEESA-2 randomized clinical trial. *Breast Cancer Res. Treat.* 2018 Feb;168(1):127-134. doi: 10.1007/s10549-017-4518-8. Epub 2017 Nov 21
  237. Hyman DM, Piha-Paul SA, Won H, Rodon J, Saura C, Shapiro GI, Juric D, Quinn DI, Moreno V, Mayer IA, Boni V, Calvo E, Loi S, Lockhart AC, Erinjen J, Scaltriti M, Taylor BS, Ulaner G, Patel J, Tang J, Beer H, Selcuklu D, Bouvier N, Li B, Schram AM, Smyth LM, Berger MF, Cutler RE, Xu F, Butturini A, Eli LD, Mann G, Farrell C, Lalani AS, Bryce BP, **Arteaga CL**, Meric-Bernstam F, Baselga J, Solit DB. HER kinase inhibition in HER2 and HER3-mutant human cancers. *Nature* 2018 Feb 8;554(7691):189-194. doi: 10.1038/nature25475. Epub 2018 Jan 31
  238. Pulley JM, Jerome RN, Ogletree ML, Bernard GR, Lavieri RR, Zaleski NM, Hong CC, Shirey-Rice JK, **Arteaga CL**, Mayer IA, Holroyd KJ, Cook RS. Motivation for launching a cancer

- metastasis inhibition (CMI) program. *Target Oncol.* 2018 Feb;13(1):61-68. doi: 10.1007/s11523-017-0542-1. Review
239. Luo N, Formisano L, Gonzalez-Ericsson PI, Sanchez V, Dean PT, Opalenik SR, Sanders ME, Cook RS, **Arteaga CL**, Johnson DB, Balko JM. Melanoma response to anti-PD-L1 immunotherapy requires JAK1 signaling, but not JAK2. *Oncoimmunol.* 2018 Mar 6;7(6):e1438106. doi: 10.1080/2162402X.2018.1438106. eCollection 2018
  240. Abramson RG, Lakomkin N, Hainline A, Kang H, Hutson MS, **Arteaga CL**. The attenuation distribution across the long axis of breast cancer liver metastases at CT: A quantitative biomarker for predicting overall survival. *Am. J. Roentgenol.* 2018 Jan; 210(1):W1-W7. doi: 10.2214/AJR.17.18249. Epub 2017 Oct 24
  241. Campone M, Im S-A, Iwata H, Clemons M, Ito Y, Awada A, Chia S, Jagiello-Gruszfeld A, Pistilli B, Tseng L-M, Hurvitz S, Masuda N, Cortés J, De Laurentiis M, **Arteaga CL**, Jiang Z, Jonat W, Le Mouhaër S, Sankaran B, Bourdeau L, El-Hashimy M, Sellami D, Baselga J. Buparlisib plus fulvestrant versus placebo plus fulvestrant for postmenopausal women, hormone receptor-positive, human epidermal growth factor receptor 2-negative advanced breast cancer: overall survival results from BELLE-2. *Eur. J. Cancer* 2018 Nov; 103:147-154. doi: 10.1016/j.ejca.2018.08.002. Epub 2018 Sep 18
  242. Guerrero-Zotano AL, Stricker TP, Hutchinson KE, Stover DG, Lee K-m, Formisano L, Schwarz LJ, Giltane JM, Estrada MV, Jansen VM, Gavilá J, Fidalgo A, Lluch A, Lombart A, Michiel S, André F, Arnedos M, Ruiz A, **Arteaga CL**. Estrogen receptor-positive (ER+) breast cancers resistant to prolonged neoadjuvant letrozole exhibit an E2F4 transcriptional program sensitive to CDK4/6 inhibitors. *Clin. Cancer Res.* 2018 Jun 1;24(11):2517-2529. doi: 10.1158/1078-0432.CCR-17-2904. Epub 2018 Mar 26
  243. Hortobagyi GN, Stemmer SM, Burris HA, Yap YS, Sonke GS, Paluch-Shimon S, Campone M, Petrakova K, Blackwell KL, Winer EP, Janni W, Verma S, Conte P, **Arteaga CL**, Cameron DA, Mondal S, Su F, Miller M, Elmeliogy M, Germa C, O'Shaughnessy J. Updated results from MONALEESA-2, a phase III trial of first-line ribociclib plus letrozole versus placebo plus letrozole in hormone receptor-positive, HER2-negative advanced breast cancer. *Ann. Oncol.* 2018 Jul 1; 29(7):1541-1547. doi: 10.1093/annonc/mdy155. PMID 29718092
  244. Bakin AV, Zonneville J, Safina AV, Truskinovsky M, **Arteaga CL**. Transforming Growth Factor- $\beta$  signaling promotes tumor vasculature by enhancing the pericyte-endothelium association. *BMC Cancer.* 2018 Jun 19;18(1):670. doi: 10.1186/s12885-018-4587-z
  245. Hoste G, Siembrouck L, Jongen L, Punie K, Matton T, Vander Borgh S, Vanden Bempt I, Menten J, Wildiers H, Floris G, **Arteaga CL**, Neven P. Unexpected benefit from alpelisib and fulvestrant in a woman with highly pre-treated ER-positive, HER2-negative *PIK3CA* mutant metastatic breast cancer. *Clin. Drug Investig.* 2018 Sep 5. doi: 10.1007/s40261-018-0696-3 [Epub ahead of print]
  246. Sudhan DR, Schwarz LJ, Guerrero-Zotano A, Formisano L, Nixon M, Croessmann SE, González-Ericsson PI, Sanders ME, Balko JM, Avogadri-Connors F, Cutler RE, Alani AS, Bryce R, Auerbach A, **Arteaga CL**. Extended adjuvant neratinib and fulvestrant block ER/HER2 crosstalk and maintain complete responses of ER+/HER2+ breast cancers: Implications to the ExteNET

- trial. Clin. Cancer Res. 2018 Oct 1. pii: clincanres.1131.2018. doi: 10.1158/1078-0432.CCR-18-1131 [Epub ahead of print]
247. Croessman S, Formisano L, Nagy G, Mathew A, Bernicker EH, Cristofanilli M, He J, Dugger T, Cutler RJ, Lalani AS, Avogadri-Connors F, Miller VA, Lanman R, **Arteaga CL**. Combined blockade of activating ERBB2 mutations and ER results in synthetic lethality of ER+/HER2 mutant human breast cancer. Clin. Cancer Res. 2018 Oct 12. pii: clincanres.1544.2018. doi: 10.1158/1078-0432.CCR-18-1544 [Epub ahead of print]
  248. Formisano L, Lu Y, Jansen VM, Bauer JA, Hanker AB, Guerrero-Zotano A, Guo Y, Gonzalez-Ericsson P, Lee K-m, Nixon MJ, Schwarz LJ, Sanders ME, Sudhan DR, Dugger TC, Rocha Cruz M, Behdad A, Cristofanilli M, Bardia A, O'Shaughnessy J, Nagy RJ, Lanman RB, Solovieff N, Miller M, Su F, Shyr Y, Mayer IA, Balko JM, **Arteaga CL**. Aberrant FGFR signaling mediates resistance to CDK4/6 inhibitors in ER+ breast cancer. Nat. Commun. 2019 Mar 26; 10(1):1373. doi: 10.1038/s41467-019-09068-2
  249. Hanker AB, Kaklamani V, **Arteaga CL**. Challenges for the clinical development of PI3K inhibitors: Strategies to improve their impact in solid tumors. Cancer Discov. 2019 Apr; 9(4):482-491. doi: 10.1158/2159-8290.CD-18-1175. Epub 2019 Mar 13
  250. Mayer IA, Aparicio AP, Egle D, Blau S, Perez Fidalgo JA, Gnant M, Fasching PA, Colleoni M, Wolff AC, Winer EP, Singer CF, Hurvitz S, García Estevez L, van Dam PA, Kuemmel S, Mundhenke C, Holmes F, Babbar N, Charbonnier L, Díaz-Padilla I, Vogl F, Sellami D, **Arteaga CL**. A phase II randomized study of neoadjuvant letrozole plus alpelisib for hormone receptor-positive, human epidermal growth factor receptor 2-negative breast cancer (NEO-ORB). Clin. Cancer Res. 2019 May 15;25(10):2975-2987. doi: 10.1158/1078-0432.CCR-18-3160. Epub 2019 Feb 5
  251. Lee T, Christov PP, Shaw S, Tarr JC, Zhao B, Veerasamy N, Jeon KO, Mills JJ, Bian Z, Sensintaffar JL, Arnold AL, Fogarty SA, Perry E, Ramsey HE, Cook RS, Hollingshead M, Davis Millin M, Lee K-m, Koss B, Budhraj A, Opferman J, Kim K, Olejniczak E, **Arteaga CL**, Moore WJ, Olejniczak E, Savona MR, Fesik SW. Discovery of potent myeloid cell leukemia-1 (Mcl-1) inhibitors that demonstrate *in vivo* activity in mouse xenografts models of human cancer. J. Med. Chem. 2019 Apr 25;62(8):3971-3988. doi: 10.1021/acs.jmedchem.8b01991. Epub 2019 Apr 16
  252. Drago JZ, Formisano L, Juric D, Niemerko A, Servetto A, Wander SA, Spring LM, Vidula N, Younger J, Peppercorn J, Yuen M, Malvarosa G, Sgroi D, Isakoff SJ, Moy B, Ellisen LW, Iafrate J, **Arteaga CL**, Bardia A. *FGFR1* gene amplification mediates endocrine resistance but retains TORC sensitivity in metastatic hormone receptor positive (HR+) breast cancer. Clin. Cancer Res. 2019 Nov 1;25(21):6443-6451. doi: 10.1158/1078-0432.CCR-19-0138. Epub 2019 Aug 1. PMID 31371343
  253. Nixon MJ, Formisano L, Mayer IA, Estrada MV, González-Ericsson PI, Isakoff SJ, Forero-Torres A, Won H, Sanders ME, Solit D, Berger M, Cantley LC, Winer E, **Arteaga CL**, Balko JM. PI3K and MAP3K1 alterations imply luminal A status and are associated with clinical benefit from the pan-PI3K inhibitor buparlisib and letrozole in ER+ metastatic breast cancer. NPJ Breast Cancer 2019 Sep 23; 5:31. doi: 10.1038/s41523-019-0126-6. eCollection 2019
  254. Jhaveri KL, Wang XV, Makker V, Luoh SW, Mitchell EP, Zwiebel JA, Sharon E, Gray RJ, Li S, McShane LM, Rubinstein LV, Patton D, Williams PM, Hamilton SR, Conley BA, **Arteaga CL**,

- Harris LN, O'Dwyer PJ, Chen AP, Flaherty K. Ado-trastuzumab emtansine (T-DM1) in patients with HER2 amplified tumors excluding breast and gastric/gastro-esophageal junction (GEJ) adenocarcinomas: Results from the NCI-MATCH trial (EAY1131) sub-protocol Q. *Ann. Oncol.* 2019 Nov 1;30(11):1821-1830. doi: 10.1093/annonc/mdz291
255. Chakrabarty A, Surendran S, Bholra NE, Mishra VS, Wani TH, Baghel KS, **Arteaga CL**, Garg R, Chowdhury G. The H1047R PIK3CA oncogene induces a senescence-like state, pleiotropy and acute HSP90 dependency in HER2+ mammary epithelial cells. *Carcinogenesis.* 2019 Oct 16; 40(10):1179-1190. doi: 10.1093/carcin/bgz118
256. Patel HK, Tao N, Lee KM, Huerta M, Arlt H, Mullarkey T, Troy S, **Arteaga CL**, Bihani T. Elacestrant (RAD1901) exhibits anti-tumor activity in multiple ER+ breast cancer models resistant to CDK4/6 inhibitors. *Breast Cancer Res.* 2019 Dec 18; 21(1):146. doi: 10.1186/s13058-019-1230-0
257. Lehmann B, Abramson V, Sanders M, Mayer E, Haddad T, Nanda R, Van Poznak C, Storniolo AM, Nangia J, Forero-Torres A, González Ericsson P, Sánchez V, Johnson K, Abramson R, Chen S-C, Shyr Y, **Arteaga CL**, Wolff A, Pietenpol J. TBCRC 032 IB/II Multicenter Study: Molecular insights to AR antagonist and PI3K inhibitor efficacy in patients with AR+ metastatic triple-negative breast cancer. *Clin. Cancer Res.* 2019 Dec 10. pii: clincanres.2170.2019. doi: 10.1158/1078-0432.CCR-19-2170. [Epub ahead of print]
258. Viswanadhapalli S, Ma S, Sareddy GR, Lee T-K, Li M, Gilbreath C, Liu X, Luo Y, Pratap UP, Zhou M, Blatt EB, Kassees K, **Arteaga CL**, Alluri P, Rao M, Weintraub ST, Tekmal RR, Ahn J-M, Raj GV, Vadlamudi RK. Estrogen receptor coregulator binding modulator (ERX-11) enhances the activity of CDK4/6 inhibitors against estrogen receptor-positive breast cancers. *Breast Cancer Res.* 2019 Dec 26;21(1):150. doi: 10.1186/s13058-019-1227-8
259. Sudhan DR, Guerrero-Zotano AL, Won H, González-Ericsson P, Servetto A, Lee K-m, Formisano L, Guo Y, Liu Q, Kinch LN, Dugger T, Koch J, Schram A, Cutler RE, Lalani AS, Bryce R, Auerbach A, Hanker AB, **Arteaga CL**. Hyperactivation of TORC1 drives acquired resistance to the pan-HER tyrosine kinase inhibitor neratinib in HER2-mutant cancers. *Cancer Cell* 2020 Feb 10;37(2):183-199.e5. doi: 10.1016/j.ccell.2019.12.013. Epub 2020 Jan 23
260. Smyth LM, Piha-Paul S, Won HH, Schram AM, Saura C, Loi S, Lu J, Shapiro GI, Juric D, Mayer I, **Arteaga CL**, de la Fuente M, Brufksy AM, Spanggaard I, Mau-Sørensen M, Arnedos M, Moreno V, Boni V, Sohn J-H, Schwartzberg L, Viteri S, González-Farré X, Cervantes A, Bidard F-C, Gorelick AN, Lanman R, Nagy B, Ulaner G, Chandarlapaty S, Jhaveri K, Gavrila EI, Zimel C, Selcuklu SD, Melcer M, Samoila A, Cai Y, Scaltriti M, Mann G, Xu F, Eli LD, Dujka M, Lalani AS, Bryce R, Baselga J, Taylor BS, Solit DB, Meric-Bernstam F, Hyman DM. Efficacy and determinants of response to HER kinase inhibition in HER-mutant metastatic breast cancer. *Cancer Discov.* 2020 Feb;10(2):198-213. doi: 10.1158/2159-8290.CD-19-0966. Epub 2019 Dec
261. Johnson DB, Zhao F, Noel M, Riely GJ, Mitchell EP, Wright JJ, Chen HX, Gray RJ, Li S, McShane LM, Rubinstein LV, Patton D, Williams PM, Hamilton SR, Conley BA, **Arteaga CL**, Harris LN, O'Dwyer PJ, Chen AP, Flaherty KT. Trametinib in cancers harboring BRAF non-V600 mutations or fusions: Results from NCI-MATCH (EAY131). *Clin. Cancer Res.* 2020 Jan 10. doi: 10.1158/1078-0432.CCR-19-3443. [Epub ahead of print]

262. Flaherty KT, Chen A, Gray R, McShane LM, Patton D, Hamilton SR, Williams PM, Iafrate AJ, Sklar J, Mitchell E, Harris LN, Sims DJ, Coffey B, Fu T, Routbort M, Zwiebel J, Rubinstein L, Little R, **Arteaga CL**, Abrams J, Comis RL, O'Dwyer PJ, Conley BA, NCI-MATCH team. The Molecular Analysis for Therapy Choice (NCI-MATCH) Trial: Lessons for Genomic Trial Design. *J. Natl. Cancer Inst.* 2020 Jan 10. pii: djz245. doi: 10.1093/jnci/djz245. [Epub ahead of print]
263. Azad NS, Gray RJ, Overman MJ, Schoenfeld JD, Mitchell EP, Zwiebel JA, Sharon E, Streicher H, Li S, McShane L, Rubenstein L, Patton DR, Williams PM, Coffey B, Hamilton SR, Baharry N, Suga JM, Hatoum H, Comis RL, Abrams JS, Conley BA, **Arteaga CL**, Harris L, O'Dwyer PJ, Chen AP, Flaherty KT. Nivolumab is effective in mismatch repair-deficient non-colorectal cancers: Results from NCI-MATCH (EAY131) arm Z1D. *J Clin. Oncol.* 2020 Jan 20;38(3):214-222. doi: 10.1200/JCO.19.00818. Epub 2019 Nov 25
264. Hanker AB, Sudhan DR, **Arteaga CL**. Recent Advances in Understanding and Targeting Endocrine Resistant Breast Cancer. *Cancer Cell* 2020 Apr 13;37(4):496-513. doi: 10.1016/j.ccell.2020.03.009
265. Salama AKS, Li A, Macrae ER, Park J-I, Mitchell EP, Zwiebel JA, Chen HX, Gray RJ, McShane LM, Rubinstein LV, Patton D, Williams PM, Hamilton SR, Armstrong DK, Conley BA, **Arteaga CL**, Harris LN, O'Dwyer PJ, Chen AP, Flaherty KT. Dabrafenib and Trametinib in Patients with Tumors with BRAF V600E Mutations: Results of the NCI-MATCH Trial Subprotocol H. *J. Clin. Oncol.* 2020 Aug 6; JCO2000762. doi: 10.1200/JCO.20.00762. Online ahead of print
266. Chae YK, Hong F, Vaklavas C, Cheng HH, Mitchell E, Zwiebel J, Rubinstein L, McShane L, Gray R, Li S, Ivy P, Ansher S, Patton D, Williams M, Hamilton S, Conley B, O'Dwyer P, Harris L, **Arteaga CL**, Chen A, Flaherty K. A Phase II Study of AZD4547 in Patients with Tumors with Aberrations in the FGFR Pathway: Results from the NCI-MATCH Trial (EAY131) Sub-Protocol W. *J. Clin. Oncol.* 2020 Jul 20;38(21):2407-2417. doi: 10.1200/JCO.19.02630. Epub 2020 May 28
267. Flaherty KT, Gray RJ, Chen AP, McShane LM, Patton D, Hamilton SR, Williams PM, Iafrate AJ, Sklar J, Mitchell EP, Harris LN, Takebe N, Sims DJ, Coffey B, Fu T, Routbort M, Zwiebel JA, Rubinstein LV, Little RF, **Arteaga CL**, Comis R, Abrams JS, O'Dwyer PJ, Conley BA; NCI-MATCH team. Molecular Landscape and Actionable Alterations in a Genomically Guided Cancer Clinical Trial: National Cancer Institute Molecular Analysis for Therapy Choice (NCI-MATCH). *J. Clin. Oncol.* 2020 Oct 13;JCO1903010. doi: 10.1200/JCO.19.03010. Online ahead of print. PMID: 33048619
268. Kalinsky K, Hong F, McCourt C, Sachdev J, Mitchell EP, Zwiebel JA, Doyle LA, McShane LM, Li S, Gray RJ, Rubinstein LV, Patton D, Williams PM, Hamilton SR, Conley BA, O'Dwyer PJ, Harris LN, **Arteaga CL**, Chen AP, Flaherty KT. AKT inhibitor Capivasertib (AZD5363) in Patients with Tumors with *AKT E17K* Mutations: NCI-MATCH Subprotocol EAY131-Y, A Trial of the ECOG-ACRIN Cancer Research Group (EAY131-Y). *JAMA Oncol.* **Accepted**
269. Lee K-m, Guerrero-Zotano AL, Servetto A, Sudhan DR, Lin C-C, Formisano L, Jansen VM, González-Ericsson P, Sanders ME, Stricker TP, Raj GV, Dean KM, Fiolka R, Cantley LC, Hanker AB, **Arteaga CL**. Proline rich 11 overexpression amplifies PI3K signaling and promotes antiestrogen resistance in breast cancer. *Nature Comm.* 2020 Oct 30; 11(1):5488. doi: 10.1038/s41467-020-19291-x

270. Garrido-Castro AC, Saura C, Barroso-Sousa R, Guo H, Ciruelos E, Bermejo B, Gavilá J, Serra V, Prat A, Paré L, Céliz P, Villagrana P, Li Y, Savoie J, Xu Z, **Arteaga CL**, Krop IE, Solit DB, Mills GB, Cantley LC, Winer EP, Lin NU, Rodon J. Phase 2 Study of Buparlisib (BKM120), a pan-class I PI3K inhibitor, in Patients with Metastatic Triple-Negative Breast Cancer. *Breast Cancer Res.* 2020 Nov 2;22(1):120. doi: 10.1186/s13058-020-01354-y
271. Rugo HS, Bardia A, Tolaney SM, **Arteaga CL**, Cortes J, Sohn J, Marmé F, Hong Q, Delaney RJ, Hafeez A, André F, Schmid P. TROPICS-02: A Phase 3 Study Investigating Sacituzumab Govitecan in the Treatment of HR+/HER2- Metastatic Breast Cancer. *Future Oncol.* 2020 Apr; 16(12):705-715. doi: 10.2217/fon-2020-0163. Epub 2020 Mar 30
272. Sapoznik E, Chang B-J, Huh J, Ju RJ, Azarova AV, Pholkamp T, Welf ES, Broadbent D, Carisey AF, Stehbins SJ, Lee K-m, Marin A, Hanker AB, Schmidt JC, **Arteaga CL**, Yang B, Kobayashi Y, Tata PR, Kruthoff R, Doubrovinski K, Shepherd DP, Millett-Sikking A, York AG, Dean KM, Fioka R. A Versatile Oblique Plane Microscope for Large-Scale and High-Resolution Imaging of Subcellular Dynamic. *eLife* 2020 Nov 12;9:e57681. doi: 10.7554/eLife.57681. Online ahead of print
273. Mayer IA, O'Neill A, **Arteaga CL**, Yang XJ, Wagner LI, Cella D, Meropol NJ, Saphner T, Swaney RE, Hoelzer KL, Gradishar WJ, Abramson VG, Sundaram K, Jilani SZ, Perez E, Lin NU, Jahanzeb M, Sledge GW. A randomized phase III double-blind placebo-controlled trial of first-line chemotherapy and trastuzumab with or without bevacizumab for patients with HER2/neu overexpressing metastatic breast cancer: a trial of the ECOG-ACRIN Cancer Research Group (E1105). **Submitted**
274. Babaev VR, Booksbank JA, Yermalitsky VN, Ding L, Zhang Y, **Arteaga CL**, Linton MF. p110 $\alpha$  overexpression induces venous malformations in mice due to endothelial cell proliferation. **In review**
275. Hanker AB, Jayanthan HS, Marin A, Ye D, Lin C-C, Sudhan DR, Sheehan JH, Koch JP, Akamatsu H, Brewer DR, Servetto A, He J, Miller VA, Lalani AS, Meiler J, **Arteaga CL**. Co-occurring gain-of-function mutations in HER2 and HER3 modulate HER2/HER3 activation, breast cancer progression, and sensitivity to HER2 inhibitors. **In review**
276. Uzhachenko R, Bharty V, Ouyang Z, Blevins A, Mont S, Saleh N, Lawrence H, Chiann S, Chen S-C, Ayers GD, DeNardo D, **Arteaga CL**, Richmond A, Vilgelm AE. Metabolic modulation by CDK4/6 inhibitors promotes chemokine-mediated recruitment of T cells into mammary tumors. **In review**
277. Servetto A, Kollipara R, Formisano L, Lin C-C, Lee K-m, Sudhan DR, Hanker AB, González-Ericsson P, Chatterjee S, Guerrero-Zotano A, Mendiratta S, Akamatsu H, James N, Bianco R, Hanker AB, Kittler R, **Arteaga CL**. Nuclear FGFR1 regulates gene transcription and promotes antiestrogen resistance in ER+ breast cancer. **In review**
278. Saleh N, Blevins A, Uzhachenko R, Lawrence HA, Bharty V, Oghumu S, Shen C, **Arteaga CL**, Richmond A, Vilgelm AE. Anti-proliferative effect of CDK4/6 inhibitors on host's immune cells impairs anti-tumor immunity in breast cancer models. **In review**
279. Metzger Filho O, Viale G, Stein S, Trippa L, Yardley DA, Mayer IA, Abramson VG, **Arteaga CL**, Spring L, Waks AG, Wrabel E, DeMeo M, Bardia A, Dell'Orto P, Russo L, King TA,



- Michor F, Polyak K, Winer EP, Krop IE. Impact of HER2 heterogeneity on treatment response of early-stage HER2-positive breast cancer; A phase II neoadjuvant trial of T-DM1 in combination with pertuzumab. **In review**
280. André F, Su F, Solovieff N, Hortobagyi G, Chia S, Neven P, Bardia A, Tripathy D, Lu Y-S, Lteif A, Taran T, Babbar N, Slamon D, **Arteaga CL**. Pooled ctDNA analysis of MONALEESA phase III advanced breast cancer trials. **In review**
281. Parida P, Marquez Palencia M, Nair V, Kaushik A, Sudderth J, Kim K, Quesada-Diaz E, Cajigas A, Vemireddy V, Gonzalez-Ericsson P, Sanders ME, Mobley B, Huffman K, Sahoo S, Alluri P, Lewis C, Peng Y, Bachoo RM, **Arteaga CL**, Hanker AB, DeBerardinis RJ, Malladi S. Metabolic diversity within breast cancer brain-tropic cells determines metastatic fitness. **In review**
282. Cleary JM, Wang V, Heist RS, Kopetz ES, Mitchell EP, Zwiebel JA, Kapner KS, Chen HX, Li S, Gray RJ, McShane LM, Rubinstein LV, Patton DR, Meric-Bernstam F, Dillmon MS, Williams PM, Hamilton SR, Conley BA, Aguirre AJ, O'Dwyer PJ, Harris LN, Arteaga CL, Chen AP, Flaherty KT. Differential Outcomes in Codon 12/13 and Codon 61 *NRAS*-Mutated Cancers in the Phase II NCI-MATCH Trial of Binimetinib in Patients with *NRAS*-Mutated Tumors. **Submitted**

### **Editorials**

1. **Arteaga CL**, Moses, HL. TGF $\beta$  in mammary development and neoplasia. *J. Mammary Gland Biol. Neopl.* 1:327-329, 1996
2. **Arteaga CL**. EGF receptor dependence in human tumors: More than just expression? *The Oncologist* 7 (Suppl. 4):31-39, 2002
3. **Arteaga CL**. Herceptin, an appropriate first-line single-agent therapy for HER2-overexpressing metastatic breast cancer. *Breast Cancer Res.* 5:96-100, 2003
4. **Arteaga CL**. Molecular Therapeutics: Is one 'promiscuous' drug against multiple targets better than combinations of molecule-specific drugs? *Clin. Cancer Res.* 9:1231-1232, 2003
5. **Arteaga CL**. Cdk inhibitor p27<sup>Kip1</sup> and hormone dependence in breast cancer. *Clin. Cancer Res.* 10:368s-371s, 2004
6. **Arteaga CL**. EGF receptor as a therapeutic target: Patient selection and mechanisms of resistance to receptor-targeted drugs. *J. Clin. Oncol.* 21:289s-291s, 2003
7. Osborne CK, **Arteaga CL**. Role of molecular and genetic markers in breast cancer treatment decisions. *J. Clin. Oncol.* 21:285s-287s, 2003
8. **Arteaga CL**. Selecting the right patient for tumor therapy. *Nature Med.* 10:577-578, 2004
9. **Arteaga CL**, Baselga J. Tyrosine kinase inhibitors: Why does the current process of clinical development not apply to them? *Cancer Cell* 5:525-531, 2004
10. **Arteaga CL**. Inhibition of transforming growth factor  $\beta$  signaling in cancer therapy. *Curr. Opin. Genet. Dev.* 16:30-37, 2006

11. **Arteaga CL.** Can trastuzumab be effective against tumors with low HER2/Neu (ErbB2) receptors? *J. Clin. Oncol.* 23:3722-3725, 2006
12. **Arteaga CL.** EGF receptor mutations in lung cancer: From humans to mice and maybe back to humans. *Cancer Cell* 9:421-423, 2006
13. **Arteaga CL.** Will single-time tumor profiling and a 'guilt by association' approach allow us to outsmart HER2-positive breast cancer? *Clin. Cancer Res.* 13:1071-1073, 2007
14. **Arteaga CL.** HER3 (ErbB3) and mutant EGF receptor meet MET. *Nature Med.* 13:675-677, 2007
15. Keedy VL, **Arteaga CL**, Johnson DH. Does gefitinib shorten lung cancer survival? *Chaos Redux. J. Clin. Oncol.* 26:2428-2430, 2008. PMID: 18378565
16. Rexer BN, Engelman JA, **Arteaga CL.** Overcoming resistance to tyrosine kinase inhibitors: Lessons learned from cancer cells treated with EGFR antagonists. *Cell Cycle* 8:18-22, 2009. PMC2719975
17. Rexer BN, Ghosh R, **Arteaga CL.** Inhibition of PI3K and MEK: It is all about combinations and biomarkers. *Clin. Cancer Res.* 15:4518-4520, 2009. PMID: 19584146
18. Mayer IA, **Arteaga CL.** Does lapatinib work against HER2-negative breast cancers? *Clin. Cancer Res.* 16:1355-1357, 2010. PMC3448974
19. Balko JM, **Arteaga CL.** Dead-box or black-box: Is DDX1 a potential biomarker in breast cancer? *Breast Cancer Res.* DOI: 10.1007/s10549-010-1105-7, 2010. PMID: 20694745
20. Abramson V, **Arteaga CL.** New strategies in HER2-overexpressing breast cancer: Many combinations of targeted drugs available. *Clin. Cancer Res.* 17:952-958, 2011. PMC3761872
21. **Arteaga CL.** ERBB receptors in cancer: Signaling from the inside. *Breast Cancer Res.* 13:304, 2011 PMC3219176
22. **Arteaga CL.** Why is this effective HSP90 inhibitor not being developed in HER2-positive breast cancer? *Clin. Cancer Res.* 17:4919-21, 2011. PMC3221729
23. Garrett JT, Chakrabarty A, **Arteaga CL.** Will PI3K pathway inhibitors be effective as single agents in patients with cancer? *Oncotarget* 2:1314-21, 2011 PMC3282088
24. Balko JM, **Arteaga CL.** Molecular signatures of lung cancer: Defining new diagnostic and therapeutic paradigms. *Mol. Diagn. Ther.* 16:1-6, 2012 PMID:22339590
25. Rexer BN, Shyr Y, **Arteaga CL.** Phosphatase and tensin homolog deficiency and resistance to trastuzumab and chemotherapy. *J. Clin. Oncol.* 31:2073-5, 2013
26. Balko JM, Stricker TP, **Arteaga CL.** The genomic map of breast cancer: Which roads lead to better targeted therapies? *Breast Cancer Res.* 2013 Jul 31;15(4):209
27. Rexer BN, **Arteaga CL.** Outsmarting cancer: The power of hybrid genomic/proteomic biomarkers to predict drug response. *Breast Cancer Res.* 16(2):303, 2014
28. Mayer IA, **Arteaga CL.** *PIK3CA* activating mutations: A discordant role in early vs. advanced hormone-dependent estrogen receptor-positive breast cancer? *J. Clin. Oncol.* 232:1202-9, 2014 PMID:25071103

29. Francis SA, Cheng S, **Arteaga CL**, Moslehi J. Heart failure and breast cancer therapies: Moving towards personalized risk assessment. *J. Am. Heart Assoc.* 2014 Feb 28;3(1):e000780. doi: 10.1161/JAHA.113.000780 PMC3959702
30. Stricker T, **Arteaga CL**. Drug-resistant brain metastases: A role for pharmacology, tumor evolution and too late therapy. *Cancer Discov.* 5:1124-6, 2015 PMID 26526693
31. Bellinger AM, **Arteaga CL**, Force T, Humphries BD, Demetri GD, Druker BJ, Moslehi J. Cardio-oncology: How cancer targeted therapies and precision medicine can inform cardiovascular discovery. *Circulation* 2015 Dec 8;132(23):2248-58 doi: 10.1161
32. Jansen VM, Mayer IA, **Arteaga CL**. Is there a future for AKT inhibitors in the treatment of cancer? *Clin. Cancer Res.* 2016 Mar 15. pii: clincanres.0100.2016 [Epub ahead of print]
33. Unni N, Sudhan D, **Arteaga CL**. Approval of neratinib as extended adjuvant therapy: Inching up on the cure rate of HER2+ breast cancer? *Clin. Cancer Res.* 2018 May 25. pii: clincanres.1114.2018. doi: 10.1158/1078-0432.CCR-18-1114 [Epub ahead of print]
34. Unni N, **Arteaga CL**. Is Dual mTORC1 and mTORC2 Therapeutic Blockade Clinically Feasible in Cancer? *JAMA Oncol.* 2019 Aug 29. doi: 10.1001/jamaoncol.2019.2525 [Epub ahead of print]

### **Invited Reviews**

1. **Arteaga CL**. Interference of the IGF system as a strategy to inhibit breast cancer growth. *Breast Cancer Res Treat* 22:101-106, 1992
2. Koli KM, **Arteaga CL**. Complex role of tumor cell transforming growth factor (TGF)- $\beta$ s on breast carcinoma progression. *J Mammary Gland Biol Neopl* 1:371-378, 1996
3. **Arteaga CL**. Basic Foundations of Molecular Therapeutics in Human Breast Carcinoma. *J. Mammary Gland Biol. & Neopl.* 4:333-335, 1999
4. **Arteaga CL**, Khuri F, Krystal G, Sebti S. Overview of rationale and clinical trials with signal transduction inhibitors in lung cancer. *Semin. Oncol.* 29 (Suppl. 4):15-26, 2002
5. **Arteaga CL**, Johnson DJ. Tyrosine kinase inhibitors – ZD1839 (Iressa). *Curr. Opin. Oncol.* 13:491-498, 2001
6. **Arteaga CL**, Moulder SL, Yakes FM. HER (*erbB*) tyrosine kinase inhibitors in the treatment of breast cancer. *Semin. Oncol.* 29 (Suppl. 11):4-10, 2002
7. **Arteaga CL**. Overview of EGF receptor biology and its role as a therapeutic target in human neoplasia. *Semin. Oncol.* 29 (Suppl. 14):3-9, 2002
8. Ritter CA, **Arteaga CL**. The EGF receptor tyrosine kinase: A promising therapeutic target in solid tumors. *Semin. Oncol.* 30 (Suppl. 1):3-11, 2003
9. **Arteaga CL**. ErbB-targeted therapeutic approaches in human cancer. *Exp. Cell Res.* 284:122-130, 2003
10. **Arteaga CL**. Targeting HER1/EGFR: A molecular approach to cancer therapy. *Semin. Oncol.* 30 (Suppl. 7):3-14, 2003

11. **Arteaga CL**, Truica CI. Challenges in the development of anti-EGF receptor therapies in breast cancer. *Semin. Oncol.* 31(Suppl. 3):3-8, 2004
12. **Arteaga CL**. Inhibiting Tyrosine Kinases: Successes and Limitations. *Cancer Biol. Ther.* 2 (Suppl. 1):80-85, 2003
13. Muraoka-Cook RS, Dumont N, **Arteaga CL**. Dual role of transforming growth factor  $\beta$  on mammary tumorigenesis and metastatic progression. *Clin. Cancer Res.* 11:937s-943s, 2005
14. Baselga J, **Arteaga CL**. Critical update and emerging trends in EGF receptor targeting in cancer. *J. Clin. Oncol.* 23:2445-2459, 2005
15. Guix M, Mayer IA, Meszoely IM, **Arteaga CL**. Evaluation of biological agents targeted at early-stage disease. *Breast Cancer Res.* 10 (Suppl. 4): S25, 2008. PMC2614851
16. **Arteaga CL**. Clinical development of phosphatidylinositol-3 kinase pathway inhibitors. *Curr. Top. Microbiol. Immunol.* 347:189-208, 2010. PMC3221735
17. Garrett JT, **Arteaga CL**. Resistance to HER2-directed antibodies and tyrosine kinase inhibitors: Mechanisms and clinical implications. *Cancer Biol. & Ther.* 11:793-780, 2011. PMC3230295
18. Yan L, Rosen N, **Arteaga CL**. Targeted cancer therapies. *Chin. J. Cancer* 1:1-4, 2011
19. Chow A, **Arteaga CL**, Wang SE. When tumor suppressor TGF $\beta$  meets the HER2 (ERBB2) oncogene. *J. Mammary Gland Biol. & Neoplasia* 16:81-8, 2011. PMC3398103
20. **Arteaga CL**, Baselga J. Impact of Genomics in Personalized Cancer Medicine. *Clin. Cancer Res.* 18:612-8, 2012 PMID:22298893
21. Rexer BN, **Arteaga CL**. Intrinsic and acquired resistance to HER2-targeted therapies in HER2 gene-amplified breast cancer: mechanisms and clinical implications. *Crit. Rev. Oncogenesis* 17:1-16, 2012. PMC3394454
22. Rexer BN, **Arteaga CL**. Optimal targeting of HER2-PI3K signaling in breast cancer: Mechanistic insights and clinical implications. *Cancer Res.* 73:3817-20, 2013. PMC3702635
23. Hanker AB, Cook RS, **Arteaga CL**. Mouse models and anti-HER2 therapies. *Oncotarget* 4:1866-7, 2013. PMC3875754
24. **Arteaga CL**. Progress in Breast Cancer: Overview in CCR Focus Research in Breast Cancer: Frontiers in Genomics, Biology and Clinical Investigation. *Clin. Cancer Res.* 19:6353-9, 2013 PMID:24298065
25. Guerrero AL, Mayer IA, **Arteaga CL**. PI3K/AKT/mTOR: Role in breast cancer progression, drug resistance, and treatment. *Cancer Metastasis Rev.* 2016 Dec; 35(4):515-524. doi: 10.1007/s10555-016-9637-x
26. Kaklamani V, Richardson AL, **Arteaga CL**. Exploring biomarkers of PI3K pathway activation in the treatment of HR+, HER2– advanced breast cancer. *The Oncologist* 2019 Mar; 24(3):305-312. doi: 10.1634/theoncologist.2018-0314. Epub 2019 Jan 16

## **Book Chapters**

1. **Arteaga CL**, Clark GM, Von Hoff DD. Laboratory assessment of new approaches to treatment: The human tumor cloning system. In: The Management of Bladder Cancer, D. Raghavan (ed), Edward Arnold (Publishers) Ltd, London, 1988
2. Weiss GR, **Arteaga CL**, Bailes JL, Koeller J, Shenkenberg TD, Von Hoff DD. New anticancer agents. In: Cancer Chemotherapy Annual, HM Pinedo and BA Chabner (eds), Elsevier Science Publishers BV, Amsterdam, 1986
3. Weiss GR, Koeller J, Shenkenberg TD, **Arteaga CL**, Bailes JS, Von Hoff DD. Miscellaneous anticancer agents. In: Cancer Chemotherapy Annual, HM Pinedo and BA Chabner (eds), Elsevier Science Publishers BV, Amsterdam, 1986
4. Weiss GR, **Arteaga CL**, Bailes JL, Koeller J, Shenkenberg TD, Von Hoff DD. New anti-cancer agents. In: Cancer Pharmacology Annual, BA Chabner and HM Pinedo (eds), Elsevier Science Publishers BV, Amsterdam, 1986
5. Weiss GR, **Arteaga CL**, Bailes JL, Koeller J, Shenkenberg TD, Von Hoff DD. New anti-cancer agents. In: Cancer Pharmacology Annual, BA Chabner and HM Pinedo (eds), Elsevier Science Publishers BV, Amsterdam, 1986
6. Weiss GR, Koeller J, Shenkenberg TD, **Arteaga CL**, Bailes JS, Von Hoff DD. Miscellaneous anticancer agents. In: Cancer Pharmacology Annual, BA Chabner HM and Pinedo (eds), Elsevier Science Publishers BV, Amsterdam, 1986
7. **Arteaga CL** and Von Hoff DD. Drug selection based on *in vitro* testing. In: Contemporary Issues in Clinical Oncology: Gastric Cancer, HO Douglass (ed), Churchill Livingstone Inc (Publishers), New York, 1988
8. Weiss GR, **Arteaga CL**, Brown TD, Craig JB, Harman GS, Koeller JM, Kuhn JG, Von Hoff DD: New anticancer agents. In: Cancer Chemotherapy Annual, HM Pinedo and BA Chabner (eds), Elsevier Science Publishers BV, Amsterdam, 1987
9. Weiss GR, **Arteaga CL**, Brown TD, Craig JB, Harman GS, Havlin KA, Kuhn JG, Von Hoff DD: New Anticancer Agents. In: Cancer Chemotherapy Annual, HM Pinedo and BA Chabner (eds), Elsevier Science Publishers BV, Amsterdam, 1988
10. **Arteaga CL** and Osborne CK. Growth factors as mediators of estrogen/antiestrogen action in human breast cancer cells. In: Regulatory Mechanisms in Breast Cancer, ME Lippman and RB Dickson (eds), Kluwer Academic Publishers, Boston, 1991
11. Moses HL, **Arteaga CL**, Alexandrow MG, Dagnino L, Kawabata M, Pierce DF, Serra R. Proc 22nd Int Symp The Princess Takamatsu Cancer Res Fund, Tokyo, 1993: Transforming growth factor  $\beta$  regulation of cell proliferation. In: Multistage Carcinogenesis, CC Harris, S Hirohashi, N Ito, et al (eds), Japan Scientific Societies Press, Tokyo, 1994
12. **Arteaga CL**. Epidermal growth factor receptors and erbB-2 in human lung cancer. In: Lung Cancer: Principles and Practice. Pass HI, Mitchell J, Johnson DH, and Turrisi AT (eds), J.B. Lippincott Company, Philadelphia, PA 1996
13. Obermiller PS, **Arteaga CL**, Pilaro A, Holt JT. Treatment of breast cancer effusions with an antisense c-fos retroviral vector. In: Clinical Trials of Genetic Therapy with antisense DNA and DNA vectors. Wickstrom E (ed), Marcel Dekker, Inc., 1996

14. **Arteaga CL.** Breast Cancer in Growth Factors and Cytokines in Health and Disease. Le Roith D, and Bondy C (eds), Jai Press Inc, Greenwich CT, 1997
15. Koli, KM, **Arteaga, CL.** Transforming growth factor- $\beta$ s type II and breast carcinoma. In: *Breast Cancer* (A. Bowcock, ed.), Contemporary Cancer Research, Human Press, 1998
16. **Arteaga CL,** McPherson J. Development of TGF $\beta$ -based therapeutic agents: Capitalizing on TGF $\beta$ 's mechanisms of action and signal transduction pathways. In: *The TGF- $\beta$  Family*. Derynck R & Miyazono K, Eds. Cold Spring Harbor Monograph Series, Cold Spring Harbor Laboratory Press, pp:1023-1061, 2008
17. **Arteaga CL.** Tyrosine Kinase Inhibitors. In: *Diseases of the Breast*. Harris JR, Lippman ME, Morrow M, Osborne CK, Eds. Lippincot Williams & Wilkins, 4<sup>th</sup> edition, pp:960-970, 2010

### **Meeting Reports**

1. Come SE, Buzdar AU, **Arteaga CL,** Brodie AM, Davidson NE, Dowsett M, Ingle JN, Johnston SRD, Lee AV, Osborne CK, Pritchard KI, Vogel VG, Winer EP, Hart CS. Second International Conference on Recent Advances and Future Directions in Endocrine Manipulation of Breast Cancer: Summary Consensus Statement. *Clin. Cancer Res.* 9:443s-446s, 2003
2. Come SE, Buzdar AU, **Arteaga CL,** Bissell, MJ, Brown MA, Ellis MJ, Goss PE, Green JE, Ingle JN, Lee AV, Medina D, Nicholson RI, Santen RJ, Schiff R, Hart C. Proceeding of the Third International Conference on Recent Advances and Future Directions in Endocrine Therapy for Breast Cancer: Conference Summary Statement. *Clin. Cancer Res.* 10:327s-330s, 2004
3. Come SE, Buzdar AU, Ingle JN, **Arteaga CL,** Brown M, Dowsett M, Hilsenbeck SG, Kumar R, Johnston SRD, Lee AV, Paik S, Pritchard KI, Winer EP, Hart C. Proceedings of the Fifth International Conference on Recent Advances in Endocrine Therapy for Breast Cancer: Conference Summary Statement. *Clin. Cancer Res.* 12:997s-1000s, 2006
4. Maher EA, Mietz J, **Arteaga CL,** DePinho RA, Mohla S. Brain metastases opportunities in basic and translational research. *Cancer Res.* 69:6015-6020, 2009. PMID: 19638593
5. **Arteaga CL,** Adamson PC, Engelman JA, Gaynor RB, Hilsenbeck SG, Limburg PJ, Lowe SW, Mardis ER, Ramsey SD, Rebbeck TR, Richardson AL, Rubin EH, Weiner GJ. AACR Cancer Progress Report 2014: Transforming lives through research. *Clin. Cancer Res.* 2014 Oct 1; 20(19 Suppl):S1-S112. doi: 10.1158/1078-0432.CCR-14-2123. Epub 2014 Sep 16
6. Kurzrock R, Colevas AD, Olszanski A, Akerley W, **Arteaga CL,** Carson WE 3<sup>rd</sup>, Clark JW, Dipersio JF, Ettinger DS, Morgan RJ, Schwartzberg LS, Venook AP, Gocke CD, Tait J, Stewart FM. NCCN Oncology Research Program's Investigator Steering Committee and NCCN Best Practices Committee Molecular Profiling Surveys. *J. Natl. Compr. Cancer Network* 13:1337-46, 2015