

DATE: 01/17/2023

NAME: HOSSEIN BORGHAEI, DO



BUSINESS ADDRESS: Fox Chase Cancer Center  
Medical Oncology  
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Philadelphia, PA 19111

BUSINES TELEPHONE: 215-214-4297

CITIZENSHIP: US

EDUCATION

DATES      DEGREE/DATE/SUBJECT

UNDERGRADUATE SCHOOL

St. Joseph's University  
Philadelphia, PA      1983-87      B.S. 1987, Biology

GRADUATE/PROFESSIONAL SCHOOL

Temple University  
School of Medicine  
Philadelphia, PA      1987-90      M.S., 1990, Microbiology

Philadelphia College of  
Osteopathic Medicine  
Philadelphia, PA      9/1992-6/96      D.O.

POSTGRADUATE TRAINING

Rotating Internship      PCOM System      7/96-6/97

Internship/Residency      Graduate Hospital      7/97-6/00

Fellowship (Hem/Onc)

Fox Chase Cancer Center 7/01- 6/04  
*Chief Fellow 2003-2004*

### FACULTY APPOINTMENTS

Chief Medical Resident, Graduate Hospital	July 2000-Jun 01
Assistant Member, Fox Chase Cancer Center	July 2004-Jan 2007
Associate Member, Fox Chase Cancer Center	January 2007
Director Lung/Head & Neck Cancer Risk Assessment Program, Fox Chase Cancer Center	January 2009
Director, Tobacco Treatment Program (New Program initiative) Fox Chase Cancer Center	August 2010
Chief, Thoracic Medical Oncology Fox Chase Cancer Center	December 2010
Chair, Research Review Committee Fox Chase Cancer Center	September 2011
Associate Professor Medical Oncology, Fox Chase Cancer Center	Jun 2012
Professor Department of Hematology and Oncology	November 2018
Co-Leader, Molecular Therapeutics Program Fox Chase Cancer Center	January 2021-2022

### SPECIALTY CERTIFICATION

American Board of Internal Medicine	197824	2000
Medical Oncology	197824	2005
Medical Oncology (Re-Cert)		2016

National Board of Osteopathic Medical Examiners (NBOME).  
Parts I,II and III.

LICENSURE

Pennsylvania OS-009600-L 1997-Present

AWARDS AND HONORS

Intern of the Year PCOM-City Avenue Hospital	1997
C. Gordon Van Arman Award, Third place, for Excellence in Inflammation Research, 8 <sup>th</sup> International Conference Inflammation Research Association, Hershey, PA	1996
American Society of Clinical Oncology, Young Investigator Award	July 2004
AACR-Bristol-Myers-Squibb Oncology Fellowship in Clinical Cancer Research (Award Declined Due to Competing Funding)	July 2004
ASCO/AACR Workshop, Methods in Clinical Cancer Research, Vail, Colorado	August 2005
American Society of Clinical Oncology Career Development Award	July 06-June 09
Robert Krigel Memorial Award for Teaching Excellence Fox Chase Cancer Center	2011
President of FCCC Medical Staff	2017-2019
Chair, Medical Staff Executive Committee	2019-2021
The Gloria and Edmund M. Dunn Chair in Thoracic Oncology Fox Chase Cancer Center	February 2019

Innovator Award	October 2019
American Cancer Society, NE Region Scientific Research Award	November 2019
CURE, Lung Cancer Hero Award	2021
Top Doctors Philadelphia	2022
World's Highly Cited Researchers by Clarivate	December 2022

### MEMBERSHIP IN PROFESSIONAL AND SCIENTIFIC SOCIETIES

American Association for Cancer Research	
American Society of Clinical Oncology	
American Osteopathic Association (AOA)	
International Association for the Study of Lung Cancer	
The Society for Immunotherapy of Cancer	
Education and Curriculum Committee Graduate Hospital	1998-2001
Tissue and Transfusion Committee Graduate Hospital	1999-2000
Curriculum Committee, Department of Internal Medicine Graduate Hospital	2000-2001
National Director, Student Osteopathic Medical Association (SOMA) Research and Development Committee,	1994-1995
Chairman, SOMA Research and Development Committee PCOM	1993-1994

### FEDERAL GRANT REVIEW COMMITTEE SERVICES

Department of Defense, ad hoc reviewer	2009-2012
NCI Spore II Committee	2018, 2021

NATIONAL AND INTERNATIONAL COMMITTEE SERVICE

ECOG Thoracic Oncology Core Committee	2009-Current
American Cancer Society Vice Chair, Clinical Cancer Research and Epidemiology Study Section	June 2006-2012
NCCN Non-Small Cell Lung Committee NCCN Mesothelioma Committee	2009-2016
Education Committee IASLC	2015-2019
Lung Master Protocol, S-1400 Co-Chair, Arm A Sub Study	2016-2017
EA5163, National PI Phase III trial with 840 subjects in NSCLC	2019-
Career Development & Fellowship Committee IASLC	2019-Current
SITC, Award Review Committee	2018-2022
ASCO, Scientific Program Committee Lung Cancer, Non-Small Cell Metastatic Track	2019-2021
ASCO, YIA and CDA Grant Selection Committee	2019-2021
ASCO, Scientific Program Committee Lung Cancer, Non-Small Cell Metastatic Track Leader	2020-2021
American Lung Association Lung Cancer Expert Medical Advisory Panel	2019-
Chair, Drug Selection Committee Lung Master Protocol- S1800	October 2020-
ECOG, Thoracic Committee co-chair	October 2021-
ASCO Plenary Series Scientific Review Committee Non-small cell lung cancer Track lead	2021-

GO2 Foundation Scientific Advisory Board	2021-
Executive Review Committee, ECOG	2022-
Association of Community Cancer Centers NTRK Committee	2023-
National PI, Lung Master Protocol (S1800/S1900)	October 2022-

#### EDITORIAL POSITIONS

Frontier Journals (Associate Editor)	2014-2017
Lung Cancer (Associate Editor)	2017-2019
Current Oncology Reports Lung Cancer Section Editor	2017- current

#### ACADEMIC COMMITTEES, FOX CHASE CANCER CENTER

Research Review Committee, Chair	2011
Response Modification Committee, Chair	2010-2012
Accrual Committee	2016-
President, Fox Chase Medical Staff	2017-2019
Chair, Medical Staff Executive Committee	2019-2022
Executive Committee on Research (ECOR) Member	2021-

#### OTHER ACTIVITIES

Member, Data Safety Monitoring Board University of Pennsylvania, CAR T cell Program	2014-Current
Chair, DSMB, U. Penn Phase I study of CAR modified T cells in patients with mesothelin expressing cancers	2015- 2016
Steering Committee, BMS CheckMate studies CheckMate 227 and 568	2015- Current

Member DSMB, Takeda Pharmaceuticals	2018- Current
Steering Committee, Merck Lenvatinib Phase III Studies	2019-Current
Chair, DSMB, Incyte Phase III trial	2020-Current
Co-Chair, City Wide Thoracic Journal Club Philadelphia	2019-Current
Chair, Steering Committee, SAPHIRE Trial Mirati	January 2020-Current
Steering committee member, AMG 757 Small cell Lung Cancer, Amgen	September 2021
Co-Chair, Steering Committee, Sotorosib in Frontline Amgen	September 2022

### FEDERAL (NIH, DOD, VA) FUNDING HISTORY

817618 (PI: Bellacosa) 7/1/2021 - 6/30/2022  
 American Lung Association Role: Co-Investigator  
 Reprogramming Lung Cancer Epigenome to Enhance Immune Checkpoint Blockade. The major goals of this project are to: 1) Determine whether TET1 and TDG overexpression is sufficient and necessary for LC progression; and 2) Evaluate the activity of TDG inhibitors and anti-PD(L)1 immunotherapy in vivo.

P30 CA006927 Supp 3 (PI: Fisher) 9/16/2020 - 7/31/2021  
 NIH Role: Program Director  
 Comprehensive Cancer Center Program at Fox Chase - Tobacco Supplement  
 The major goals of this project are to: 1) Centralize and institutionalize the identification of all patients who use or recently quit using tobacco products through the expansion of tobacco use assessment in the EMR for all cancer patients and a newly established Tobacco Registry (REDCap); 2) Expand tobacco cessation support to all cancer patients through a variety of TTP services using a variety of communication tools; 3) Determine the implementation and outcome effectiveness of evidence-based tobacco treatment program at the organizational and patient level, particularly as it relates to challenges imposed

by race, socioeconomic status, and ethnicity; and 4) Develop a robust business plan that can be adapted during the award period based on observed outcomes to assure sustainability in the future.

T2018-013 (PI: Borghaei) 11/1/2018 - 10/31/2022

V Fdn Role: Principal Investigator

Biomarkers of Combined PD1 and VEGFR2 Blockade in Metastatic NSCLC

The major goals of this project are: 1) To explore if the response to combined VEGFR2 and PD-1 inhibition in metastatic NSCLC can be predicted by the pre- or post-therapy circulating immune cell phenotypes and/or cytokines and soluble biomarkers; 2) Evaluate if pre-treatment tumor % PD-L1, tumor mutational burden (TMB), gene expression signature by gene expression profiling, or % CD4+, CD8+ TILs predict response to treatment with combined VEGFR2 and PD-1 inhibition in metastatic NSCLC; and 3) Determine the biological basis of distinct tumor biology and responses between European American (EA) and African American (AA) patients with metastatic NSCLC treated with PD-1 and VEGFR2 inhibitors, using cytokine and mRNA expression profiling.

P30 CA006927 (PI: Fisher) 8/12/2016 - 7/31/2021

NIH Role: Chair, RRC

Comprehensive Cancer Center Program at Fox Chase

The major goal of this Cancer Center Support Grant is to provide partial salary support for professional personnel, including senior and program leadership, administration, planning and evaluation, and developmental funds, as well as support for 5 established peer-reviewed Research Programs, 12 Shared Research Resources and 2 Support Elements.

R41 CA174031 Supp (PI: Jones, Arisaph Pharm.) 9/1/2013 - 8/31/2014

NIH Role: Principal Investigator

A Small Molecule to Activate Cetuximab to Kill K-RAS Mutant Colorectal Tumors

This administrative supplement is a subcontract to Arisaph Pharmaceuticals.

R41 CA174031 (PI: Jones, Arisaph Pharm.) 9/24/2012 - 8/31/2014

NIH Role: Principal Investigator

A Small Molecule to Activate Cetuximab to Kill K-RAS Mutant Colorectal Tumors

This grant is in a one year extension.

This STTR Phase I project is a subcontract with Arisaph Pharmaceuticals.

NCCNYIA120015 (PI: Denlinger) 9/1/2012 - 8/31/2014

NCCN Role: Co-Investigator

Adherence to NCCN Survivorship Care Guidelines in Non-Small Cell Lung Cancer and Colorectal Cancer Survivor Care

The primary aim of the proposal is to evaluate adherence of oncology health care providers to NCCN guidelines for cancer survivorship care as defined in the NCCN guidelines on colorectal cancer and non-small cell lung cancer.



R01 CA163930 (PI: Bachovchin, Tufts Univ.) 8/10/2012 - 5/31/2017  
NIH Role: Principal Investigator  
Using FAP to Selectively Target Epithelial Cancers  
This project is a subcontract to Tufts University.

R21 CA198657-01A1 (PI: Scott Dessain and Hossein Borghaei)  
1/1/2016- 12/30/2018  
NIH Role: Principal Investigator  
The IgG response to autologous antigens in cancer patients following anti-PD1 therapy

U10 CA027525 (PI: Goldstein) 5/1/2010 - 2/28/2015  
NIH Role: Research Physician  
Eastern Cooperative Oncology Group  
This grant is in a one year extension.  
The major goals of this project are to: 1) maintain a level of accrual to ECOG studies; 2) increase the level of multidisciplinary involvement by integrating key modality-oriented individuals into ECOG activity in our affiliate institutions; 3) increase our contribution to the scientific activities of ECOG; and 4) maintain a high level of scientific and administrative involvement in ECOG programs.

### **Completed Research Support**

(PI: Borghaei) 7/1/2006 - 6/30/2009  
ASCO Role: Principal Investigator  
Induction of Host Immune Responses Following Treatment with  
Cetuximab in Patients with Metastatic Colorectal Cancers  
The major goals of this project are: 1) To determine the frequency of induction of host anti-EGF antibody production by cetuximab treatment, using ELISA assays and immunoprecipitation; and 2) To determine the rate of induction of T cell responses.

Induction of Host Immune Responses and ADCC  
ASCO, Career Development Award July 2006-Dec 2009  
Role: PI

Nanotechnology Institute, Biosensors Core Grant July 2007- 2008, Renewed  
2008-2010 Role: Principal Investigator  
This is a collaborative effort between Drexel University and Fox Chase Cancer Center. The major goals of this project is to determine the efficacy of nano – cantilevers in detecting antibody responses in the serum of patients treated with various anti-EGFR antibodies and in to determine the extend of T cell induction.

Keystone Initiative Grant, State of Pennsylvania 2009-2011  
Role: Co-Principal Investigator  
This is a collaborative effort between the Lankenau Hospital, Temple University and Fox Chase Cancer Center. The major goal of this project is the isolation and

characterization of novel antibodies generated by patients during treatment with monoclonal antibodies for advanced malignancies.

NON-FEDERAL, NON-INDUSTRY FUNDING HISTORY (ACS, SUB-SPECIALTY GROUP, OTHER)

Keystone Initiative Grant, Pennsylvania 2008-2010

4100051725 (PI: Carl Jun, Penn) 6/1/2010 – 5/31/2014

PA DOH Role: Principal Investigator

Novel Adjuvants for Cancer Vaccine Immunotherapy:

Project 1 Phase II Trial Testing the Safety and Mechanisms of Action of CD326 (EpCAM) Based Immunotherapy.

This is a collaborative effort with the University of Pennsylvania focusing on the development of cancer vaccines for solid tumors.

Didpetidyl Peptidase activity in solid tumors (Arisaph) 2009- 2012

PENDING GRANTS

DOD LCRP Concept Award: Overcoming Therapeutic Resistance EGFR-mutated Lung Cancer. Submitted May 2022

INDUSTRY FUNDING HISTORY

Biogen/Idec	2004-2009
Genentech/OSI	2006-202
Spectrum	2009-2012
Millennium (trial)	2011- Current
Arisaph (lab)	2009-2013
Pfizer (lab)	2011- 2014
Millennium	2014- 2016
Merck/Celgene	2016- Ended
BMS/Lilly	2018-Current

PENDING FUNDING (INCLUDING SOURCE)

R 41CA, A Small Molecule to Activate Cetuximab to Kill *KRAS* Mutant Colorectal Tumors

INVITED TALKS IN CONFERENCES

Medical College of Georgia, Cancer Center Anti-EGFR Immunotherapy	Aug. 8, 2007
Amgen Sales Force Training Program, Lung Cancer	Oct. 2006
14 <sup>th</sup> Annual PCOM Family CME Seminar Hershey, PA	June 2006
Philadelphia College of Osteopathic Medicine, CME, Program Chair, Recent Advances in Oncology	July 2005
Pennsylvania Osteopathic Medical Association Annual CME Program, Valley Forge, Pennsylvania	April 2009
Medscape CME Program; Treatment of NSCLC: Emerging Therapies, Novel Agents	April 2010
Philadelphia College of Osteopathic Medicine, CME, Program Chair, Recent Advances in Oncology	May 2010
CME Program, Oncology Practice Review Physician Education Resources, Philadelphia	July 2010
Medscape CME Program Integrating Tumor Histology and Genetic Analysis into the Selection of Treatment Regimens in NSCLC	Sept. 2010
Molecular Medicine, TRI-CON Convention Center, San Francisco Detection of Host Immune Responses Using Micro-cantilevers	Feb. 23,2011
Third Annual FCCC Advances in Thoracic Oncology Conference Controversies and Challenges in the Management of Thoracic Disease (Co-Chair)	April 2011
University of Alabama Cancer Center Birmingham, Alabama	October 2011

Medscape Oncology, CME Program Non-Small Cell Lung Cancer Today and Tomorrow: Putting 2012 ASCO Conference Data Into Perspective	Jun 2012
Celgen, Solid Tumor Division Management of Non-Small Cell Lung Cancer	July 2012
Medscape Oncology, CME Event Demarcating the Angiogenic Pathway in NSCLC	August 2012
The Twentieth Paul J. Grotzinger Lecture Molecularly Targeted Therapies In NSCLC	September 2012
Clinical Trials In Lung Cancer AWARE Community Meeting, Philadelphia	March 2013
AACR, Session Chair Minisymposium-EGFR Family, PI3K, AKT... San Diego, CA	April 2014
State of Science Lecture, Bristol Meyer Squibb Treatment of NSCLC and Immunotherapy	July 2014
Celgene, Global Strategic Planning Immunotherapy and NSCLC	September 2014
Antibody Engineering and Therapeutics Targeting Checkpoint Inhibitors in NSCLC--	December 2014
15 <sup>th</sup> Annual Targeted Therapies of the treatment of Lung Cancer, Santa Monica Antibodies against TEM7R	February 2015
Medscape Oncology, CME Event Current Concepts in Individualized Care of ALK-Translocated Advanced NSCLC	April 2016
Medscape Oncology, CME Event Updates in Lung Cancer: Insights from ASCO	Jun 2016
University of Kansas Cancer Center ASCO Update, Immunotherapy of Lung Cancer	September 2016
OncLive 2016 State of the Science Summit Philadelphia	September 2016

34 <sup>th</sup> Annual Chemotherapy Foundation Symposium New York	November 12 2016
11 <sup>th</sup> Annual NY Lung Cancer Symposium New York	November 12, 2016
Immuno-Oncology Conference, Springer Sao Paolo, Brazil	November 18, 2016
IASLC Meeting, Oral Abstracts Discussant Vienna, Austria	December 2016
Multi disciplinary Thoracic Cancers Symposium ASCO/ASTRO/The Society of Thoracic Surgeons San Francisco	March 2017
Advances in Thoracic Oncology Conference (Fox Chase/Temple Lung Center CME) Program co-Chair	April 8, 2017
Juravinski Cancer Centre, Hamilton, Ontario Keynote Speaker, Faculty Research Day	April 21, 2017
Astra Zeneca, Lung Cancer Summit Immuno-Oncology and Lung Cancer Los Angeles, CA	April 22, 2017
Pennsylvania Osteopathic Medical Association (POMA) Immunotherapy of Lung Cancer, CME event	April 29, 2017
American Society of Clinical Oncology (ASCO) Education Session, Management of IO Toxicities	Jun, 3 2017
Dutch TV live Interview at ASCO Immunotherapy of lung cancer	Jun, 6 2017
ASCO Lung Cancer Update Atlantic Care Health Care, Morristown, NJ	Jun 17, 2017
Asia Pacific Cancer Conference Seoul, Korea	Jun 21-23 2017
Best of ASCO	July 22, 2017

Huntington Beach, CA	
Japanese Society of Medical Oncology Tokyo, Invited Speaker, Immunotherapy of NSCLC	July 23-27 2017
Best of ASCO, Philadelphia Program Chair	August 2-3, 2017
35 <sup>th</sup> Annual Chemotherapy Foundation Symposium New York	November 2017
12 <sup>th</sup> Annual NY Lung Cancer Symposium New York	November , 2017
IASLC Targeted Therapy Lung Cancer Santa Monica, CA	February 2018
Novel Immunotherapy Combinations in the Initial Management of Non-Small Cell Lung Cancer. Education Session	ASCO 2018
Circulating Biomarkers for Immunotherapy: Are They Ready for Your Clinic? Session Discussant	ASCO 2018
ASCO Update, Philadelphia Program Chair	August 2018
OncLive, State of Science Meeting, Summit, NJ Advanced NSCLC	October 2018
CTEP Early Drug Development Meeting NCI Shay Grove	October 2018
IASLC Annual Meeting, Toronto, CA Session Discussant, OA05	October 2018
36 <sup>th</sup> Annual Chemotherapy Foundation Symposium New York	November 2018
13 <sup>th</sup> Annual NY Lung Cancer Symposium New York	November 2018
Master Clinician Alliance (Canada) CME Accredited Program, Changing Landscape of NSCLC Treatment	December 2018
IASLC Targeted Therapy Lung Cancer	February 2019

Santa Monica, CA

ASCO Annual Meeting Session Chair, Metastatic Lung cancer Oral Abstract Presentations	Jun 2019
20 <sup>th</sup> Annual International Lung Cancer Conference Huntington Beach, California	July 2019
MA25.01 - Pembrolizumab Plus Chemotherapy for Advanced NSCLC Without Tumor PD-L1 Expression: Pooled Analysis of KN021G, KN189 and KN407 IASLC World Lung Cancer Conference, Barcelona	September 7-10 2019
ES24.01 - Recognizing Toxicities in an Early Phase in PDL1 Treatment IASLC World Lung Cancer Conference, Barcelona	September 7-10 2019
PC05.04 - ICIs for Elderly Patients with Advanced NSCLC IASLC World Lung Cancer Conference, Barcelona	September 7-10 2019
IASLC Targeted Therapy Lung Cancer Santa Monica, CA	February 20-23 2020
Immunotherapy in lung Cancer Thomas Jefferson University, CME Program	March 6 2020
COVID Roundtable Discussion, AXIS Program Co-Chair, Virtual Program	March 27, 2020
Research to Practice, NSCLC Summit Virtual Program	May 8, 2020
Know Thy Organ, AACR Annual Meeting Virtual Educational Session	June 22, 2020
Oncology Annual Review, CME Program Atlantic Health, Summit NJ, Virtual Program	June 27, 2020
ASCO Direct, Highlights Co-Chair, Philadelphia Program	July 25, 2020
Grand Rounds, University of Nebraska	September 1, 2020
IASLC Targeted Therapy Lung Cancer Santa Monica, CA	February 19-22, 2021
ASCO Annual Meeting Education Program	Jun 2022

## IO Toxicity and Management, Long Term Data

DAVA Oncology Hawaii Thoracic Malignancy Meeting July 2022

23<sup>rd</sup> Annual International Lung Cancer Congress July 2022  
Huntington Beach, CA

IASLC, World Lung Conference, Vienna, Austria August 2022  
OA12.05 Phase 1 Updated Exploration and First Expansion  
Data for DLL3- targeted T-cell Engager Tarlatamab in  
Small Cell Lung Cancer, JTO, Vol 17, Issue 9, Suppl, Page S33

## TEACHING

Teaching Attending, Ward Service 6 Months  
Graduate Hospital 2000-01

Third Year Medical Student's Lectures  
Common Cancers, Graduate Hospital 2000-01

Morning Report Teaching Attending  
Graduate Hospital 2000-01

Graduate Medical Clinic  
Attending, one session/ week 2000-01

Biochemistry and Molecular Biology  
Case Studies, PCOM 1996-98

## MENTORSHIP HISTORY

Bryan Faller, MD (Fellow at Fox Chase, between 2007 and 2010) Project  
accepted for the ASCO/AACR Clinical Trial Workshop at Vail.

Andrew Martin Summer 2011  
(Accepted to Thomas Jefferson Medical College)

Caroline Vail Summer 2012

Sarah Leventhal Summer 2012 (MD)

Scott Norberg 2013-2015 (NIH)

Julia Judd 2014- Current (fellow)

Mackenzie Kramer 2017-2019



## PATENTS

Methods for Immune Response Detection  
(US Patent No. 61/249,950)

Monoclonal Antibody Against TEM7R  
(Patent No: 8,883,978 B2)

## RESEARCH PUBLICATIONS

1. Borghaei, H., Borghaei, R.C., Ni, X., Pease, E., Thornton, R. and Mochan, E. (1997) Inhibition of IL-1 induced collagenase expression by dihomo- $\gamma$ -linolenic acid (DGLA) may be mediated by inhibition of NF $\kappa$ B binding. *Inflamm Res.* 46:S177-178.
2. Ni, X., Borghaei, H., Borghaei, R.C., Thornton, R.D., Pease, E. and Mochan, E. (1997) DGLA discoordinately suppresses IL-1 induced metalloproteinase mRNA levels in human synovial fibroblasts. *Inflamm. Res.* 46: S124-126.
3. Borghaei, H. and Rolston, D. Ruptured Solitary Iliac Artery Aneurysm Presenting as a Seizure Disorder. *Arch. Intern. Med.* 2000, Mar. 27,160(6):872.
4. Hossein Borghaei and Russell Schilder. Safety and Efficacy of Ibritumomab tiuxetan. *Seminars in Nuclear Medicine*, Vol. 36, No 1, Suppl 1 (January), 2004:pp 4-9.
5. Hossein Borghaei, Stephen Wallace and Russell Schilder. Factors Associated with Toxicity and Response to Yttrium 90 Ibritumomab tiuxetan in Patients with Low Grade Non-Hodgkin's Lymphoma. *Clinical Lymphoma*, 2004 Oct,5 Suppl 1,S16-21
6. Hossein Borghaei, Michael Millenson, Russell Schilder, Mitchell Alden, Andre Rogatko, Hao Wong, Kristin Padavic-Shaller and Mitchell Smith. Phase II Study of Paclitaxel and Estramustine in Patients with Recurrent and Refractory Non-Hodgkin's Lymphoma. *Cancer*, Nov. 1, 2004;101(9)2034-41
7. Kalyani Narra, Hossein Borghaei, Tahseen Al-Saleem, Martin Höglund, Mitchell R. Smith. Pure Red Cell Aplasia in B-cell Lymphoproliferative disorder treated with Rituximab: Report of two cases and review of the literature. *Leukemia Research*, July, 2005.

8. Louis M. Weiner, MD and Hossein Borghaei, DO. Targeted Therapies in Solid Tumors: The Benefits of Monoclonal Antibodies and Small Molecules. In Human Antibodies, 2006.
9. Hossein Borghaei, R. Katherine Alpaugh, Patricia Bernardo, Irma E. Palazzo, Janice P. Dutcher, Usha Venkatraj, William C. Wood, Lori Goldstein and Louis M. Weiner. Phase IB/II trial of 2B1 bispecific murine monoclonal antibody in metastatic breast cancer. Journal of Immunotherapy, May/June;30(4):455-467, 2007.
10. Hossein Borghaei, Corey J. Langer, Michael Millenson, Karen J. Ruth, Samuel Litwin, Holly Tuttle, Judie Sylvester Seldomridge, Marc Rovito, David Mintzer, Roger Cohen and Joseph Treat . Phase II Study of Paclitaxel, Carboplatin, and Cetuximab as First Line Treatment for Patients with Advanced Non-small Cell Lung Cancer (NSCLC): Results of OPN-017. Journal of Thoracic Oncology, 2008 Nov;3(11):1286-92.
11. Chao Hui Huang, Michael M. Millenson, Eric J. Sherman, Hossein Borghaei, David M. Mintzer, Roger B. Cohen, Arthur P. Staddon, Judi Seldomridge, Joseph Treat, Holly Tuttle, Karen J. Ruth, and Corey J. Langer. Promising Survival in Patients with Recurrent Non-small Cell Lung Cancer Treated with Docetaxel and Gemcitabine in Combination as Second-Line Therapy. J Thorac Oncol. 2008 Sep;3(9):1032-8
12. Danielle Shafer, Hong Wu, Tahseen Al-Saleem, Kavita Reddy, Hossein Borghaei, Stuart Lessin, Mitchell Smith. Cutaneous Precursor B-Cell Lymphoblastic Lymphoma in 2 Adult Patients .Arch Dermatol. 2008;144(9):1155-1162
13. Borghaei H, Mehra R, Simon G. Current issues in adjuvant chemotherapy for resected, stage IB non-small-cell lung cancer. Future Oncol, 5(1):19-22, 2009.
14. Hossein Borghaei, Katherine Alpaugh, Gunnar Hedlund, Go`ran Forsberg, Corey Langer, Andre Rogatko, Robert Hawkins, Svein Dueland, Ulrik Lassen, and Roger B. Cohen. Phase I Dose Escalation, Pharmacokinetic and Pharmacodynamic Study of Naptumomab Estafenatox Alone in Patients With Advanced Cancer and With Docetaxel in Patients With Advanced Non-Small-Cell Lung Cancer. J. Clin. Onc., 2009 Sep 1;27(25):4116-23. PMID: 19636016
15. Demetri GD, Casali PG, Blay JY, von Mehren M, Morgan JA, Bertulli R, Ray-Coquard I, Cassier P, Davey M, Borghaei H, Pink D, Debiec-Rychter M, Cheung W, Bailey SM, Veronese ML, Reichardt A, Fumagalli E, Reichardt P. A phase I study of single-agent nilotinib or in combination with imatinib in patients with imatinib-resistant gastrointestinal stromal tumors. Clinical Cancer Research, 2009 Sep 15;15(18):5910-6. PMID: 19723647, NIHMSID: NHMS191315

16. Borghaei H, Smith MR, Campbell KS. Immunotherapy of cancer. *Eur J Pharmacol.* 625(1-3):41-54, 2009, PMID: 19837059.
17. Faller BA, Robu VG, Borghaei H. Therapy-Related Acute Myelogenous Leukemia with an 11q23/MLL Translocation Following Adjuvant Cisplatin and Vinorelbine for Non-Small-Cell Lung Cancer. *Clin Lung Cancer.* 2009 Nov;10(6):438-40. PMID: 19900863.
18. O'Brien S, Berman E, Borghaei H, Deangelo DJ, Devetten MP, Devine S, Erba HP, Gotlib J, Jagasia M, Moore JO, Mughal T, Pinilla-Ibarz J, Radich JP, Shah Md NP, Shami PJ, Smith BD, Snyder DS, Tallman MS, Talpaz M, Wetzler M. NCCN Clinical Practice Guidelines in Oncology: Chronic Myelogenous Leukemia. *J Natl Compr Canc Netw.* 2009 Oct;7(9):984-1023, PMID: 19878641.
19. Robinson MK, Alpaugh RK, Borghaei H. Naptumomab estafenatox: a new immunoconjugate. *Expert Opin Biol Ther.* 2010 Feb;10(2):273-9.
20. Randi J. Cohen, Navesh K. Sharma, Jian Q. (Michael) Yu, Lu Wang, Mark K. Buyyounouski, Michael Unger, Hossein Borghaei, Earl King, Walter Scott, Elaine Callahan, Benjamin J. Movsas, Steven J. Feigenberg. A phase I radiation dose escalation of stereotactic body radiotherapy for malignant lung tumors. *J. Biomedical Science and Engineering*, 2010, 3, 351-358.
21. Frits van Rhee, Luis Fayad, Peter Voorhees, Richard Furman, Sagar Lonial, Hossein Borghaei, Lubomir Sokol, Julie Crawford, Mark Cornfeld, Ming Qi, Xiang Qin, Jennifer Herring, Corey Casper, and Razelle Kurzrock. Siltuximab, a Novel Anti-Interleukin-6 Monoclonal Antibody, for Castleman's Disease, *Journal of Clinical Oncology*, July, 2010, 10.1200/JCO.2009.27.2377.
22. LiNa Loo, Wei Wu, Wan Y. Shih, Wei-Heng Shih, Hossein Borghaei, Kambiz Pourrezaei and Gregory P. Adams. A Rapid Method to Regenerate Piezoelectric Microcantilever Sensors (PEMS), *Sensors* 2011, 11, 5520-5528; 15 March 2011; in revised form: 10 May 2011 / Accepted: 17 May 2011 / Published: 20 May 2011
23. Sarah Goodyear and Hossein Borghaei. Lung Cancer Vaccines, A Review of Ongoing Trials, *Clinical Investigation* (2011, 1(6))
24. Kalemkerian GP, Akerley W, Bogner P, Borghaei H, Chow L, Downey RJ, Gandhi L, Ganti AK, Govindan R, Grecula JC, Hayman J, Heist RS, Horn L, Jahan TM, Koczywas M, Moran CA, Niell HB, O'Malley J, Patel JD, Ready N, Rudin CM, Williams CC Jr; National Comprehensive Cancer Network. Small cell lung cancer. *J Natl Compr Canc Netw.* 2011 Oct;9(10):1086-113. PMID: 21975911
25. Renato G. Martins, Thomas D'Amico, Billy W. Loo, Mary Pinder-Schenk, Hossein Borghaei, Jamie E Chافت, Apar Ganti, Feng-Ming (Spring) Kong, Mark G Kris,

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