

Curriculum Vitae Jennifer A. Woyach, MD

General information

Division of Hematology
The Ohio State University
Wexner Medical Center
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Education

June 2005 MD, Cum Laude, The Ohio State University College of Medicine and Public Health, Columbus, Ohio
May 2001 BS, Magna cum laude, University of Notre Dame, Notre Dame, Indiana

Postdoctoral Training

2009-2012 Fellow in Hematology and Medical Oncology, The Ohio State University, Columbus, Ohio
2008-2009 Chief Resident, Internal Medicine, The Ohio State University, Columbus, Ohio
2005-2008 Intern and Resident in Internal Medicine, The Ohio State University, Columbus, Ohio

Certification and Licensure

9/14/07-present State Medical Board of Ohio; 35.090526
10/01/05-6/23/08 MD Training Certificate; 57.010410

Current Position

Present Professor of Medicine, Division of Hematology, Department of Internal Medicine, The Ohio State University, Columbus, OH

Professional Experience and Academic Appointments

6/2016-5/2020 Associate Professor of Medicine, Division of Hematology, Department of Internal Medicine, The Ohio State University, Columbus, OH
2012-2016 Assistant Professor of Medicine, Division of Hematology, Department of Internal Medicine, The Ohio State University, Columbus, OH
7/2017-present Section Chief, Chronic Lymphocytic Leukemia and Hairy Cell Leukemia, Division of Hematology, Department of Internal Medicine

10/2018-present Senior PI, Director of Human Studies, Experimental Hematology
Laboratory, The Ohio State University

8/2019-present Associate Division Director for Clinical Research, Division of Hematology,
The Ohio State University

Honors and Awards

April 2020 Top 10 Clinical Research Achievement Award Recipient, Clinical Research Forum

November 2019 Most Significant Manuscripts, Alliance
Publications Committee

October 2019 Castle-Connolly Exceptional Women in Medicine

August 2019 Castle-Connolly America's Top Doctors

July 2017 Press Ganey Patient Satisfaction Survey Top 10 of Providers Nationally

December 2015 Excellence in Teaching Award, The Ohio State University
Department of Internal Medicine

February 2015 American Society of Clinical Investigation Young Physician-Scientist Award

December 2014 Michael R. Grever Distinguished Professor Lectureship Award

October 2014 Early Career Achievement Award, The Ohio State University College
of Medicine

June 2012 James V. Warren Internal Medicine Fellow Research Award, The Ohio State
University

December 2011 American Society of Hematology Abstract Merit Award

June 2011 Divisions of Hematology and Oncology Fellow Research Award, The Ohio
State University

December 2009 American Society of Hematology Annual Meeting Travel Award

June 2009 Clara D. Bloomfield Excellence in Hematology/Oncology Research Award,
The Ohio State University

June 2009 Department of Internal Medicine "Top 10" Medical Student Educators, The
Ohio State University

June 2005 Internal Medicine Departmental Medical Student Award, The Ohio State

- June 2005 Alpha Omega Alpha Honor Society
- June 2005 Gold Humanism Honor Society
- 2001 Hyde and Hyde Memorial Scholarship to The Ohio State University College of Medicine and Public Health
- 1997-2001 Glenna R Joyce Scholarship to the University of Notre Dame

Professional Memberships and Activities

- Present American Society for Clinical Investigation
- 2010 - present American Society of Clinical Oncology
- 2010 - present American Association for Research
- 2009 - present American Society of Hematology

Committee Assignments and Administrative Services

National/International Organizations

German CLL Study Group

- 2016 Organizer and Session Chair, Young Investigator Meeting, Cologne Germany

International Workshop on CLL (iwCLL)

- 2019 Abstract Reviewer, iwCLL Edinburgh, UK
- 2016 Organizer, Young Investigator Meeting, New York, New York
- 2015 Organizer, Young Investigator Meeting, Sydney, Australia
- 2013 Member of Consensus Workshop: Stratifying fitness in CLL patients in need of therapy

International Research Group Review Services

- 2016 Peer Reviewer for Ireland Health Research Board Research Training Fellowship for Healthcare Professionals
- 2014 Peer Reviewer for Leukemia & Lymphoma Research, United Kingdom Research Group
- 2013 Peer Reviewer for Phase III Trial of Initial Therapy in CLL, United Kingdom Cancer Research Group

American Society of Hematology

- 2019-present Member, ASH Women in Hematology Working Group
- 2019-present Chair, Hematology Opportunities for the Next Generation(HONORS) Awards Study Section
- 2016-present Member, Training Awards Subcommittee
- 2015 Annual Meeting Session Moderator: Molecular Pharmacology, Drug Resistance – Lymphoid and Other Diseases: Novel Targets and Therapeutics
- 2015-2018 Chair, Physician Scientist Career Development Award Grant Review Committee

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Updated:10/27/20

2015-2017	Research Training Award for Fellows Grant Review Committee
2013	Highlights of ASH (HOA) in North America Speaker (Atlanta and Miami)
2013	Abstract Reviewer: CLL Therapy Excluding Transplantation
2013-present	Outreach Subcommittee
2012	Self-Assessment Program Chapter Reviewer (CLL)
2010	Task Force on Practitioner Needs
2010-2012	Trainee Council
Alliance for Clinical Trials in Oncology	
2016	Reviewer: Best of the Alliance publications 2015-2016
2013-present	Cancer in Older Adults Committee Cadre Member (previously Cancer in the Elderly Committee)
2011-present	Leukemia Committee Cadre Member
National Cancer Institute	
2019-present	Member, Subcommittee J Review Panel
2018	Reviewer, NIH/NCI Special Emphasis Panel Grants on Clinical and Translational Exploratory/Developmental Studies of Biomarkers
2016	Reviewer, NIH/NCI Career Development Grants, subcommittee J
Leukemia & Lymphoma Society (LLS)	
2018	Reviewer, LLS Website Patient Education Materials
TheMedNet.org	
2018-present	Expert/Response Provider, Malignant Hematology Category Inquiries
<u>Institutional</u>	
01/24/2020	Panelist, Center for Clinical and Translational Science, Davis Bremer Study Section
10/16/2018	Panelist, Center for Faculty Advancement, Mentoring and Engagement (FAME) CME Session: Developing National / International Reputation
09/25/2018	Panelist, Panel on Staffing a Research Team, Center for Clinical & Translational Science Tools of the Trade Program for New Investigators, Launching Your Biomedical Research Career
2018	Committee Member, OSU Internal Medicine Chair Search Committee
2018-present	Committee Member, Genetically Engineered Mouse Modeling Core Oversight Committee, OSUCCC
01/10/2018	Facilitator, Center for Faculty Advancement, Mentoring and Engagement (FAME) CME Session: Advancing to Associate Professor on Tenure Track
5/12/17	Facilitator, K Workshop for Junior Faculty
2017-present	Academy Member, MSTP Mentor Academy, College of Medicine Medical Scientist Training Program
2017-2019	Committee Member, Department of Internal Medicine Appointments, Promotions and Tenure Committee
2016	Speaker, Department of Internal Medicine 2016 Research Retreat
2016	Participant, Department of Internal Medicine 2016 Research

	Retreat
2014, 2015, 2018	Poster Judge, OSUWMC Trainee Research Day
2014, 2015, 2018	Poster Judge, OSUMC, Dept. of Internal Medicine Clinician
	Scientist Trainee Research Day
2014	SUCCESS Faculty Panel
2013-present	Committee Member, Department of Internal Medicine Intern Selection Committee
2010-2012	Departmental Science Curriculum Working Group
2009-present	Columbus Free Clinic Advisory Board

Industry Advisory Board Participation/Data Presentation/Other Service

June 2020	Abbvie COVID 19 Virtual Advisory Board
Apr 2018-present	AstraZeneca MedScope Oncology/Global Steering Committee for Educational Sessions
Dec 2016	Janssen Advisory Board Member and Data Presenter
Jan 2016-present	Gilead, Inc. Data Safety Monitoring Board Member, Idelalisib in Follicular Lymphoma Phase III Study
Dec 2015	Morphosys, Inc: MOR00208 CD19 Antibody in CLL (Investor Meeting)
Sep 2013	Pharmacyclics, Inc: Lymphocytosis Related to Ibrutinib
Jan 2013	Morphosys, Inc: MOR00208 CD19 Antibody in CLL
Dec 2012	Onyx Pharmaceuticals: Carfilzomib in CLL

Educational Activities

Lectures

2019	Lecturer: "Lymphoid Leukemias," Med 2 Students Hematology Block Session
2018	Lecturer: "Lymphoid Leukemias," Med 2 Students Hematology Block Session
2018	Preceptor: Intern Huddle
2017	Lecturer: "Relapsed CLL," Hem/Onc Fellowship Conference Lecture Series
2016	Lecturer: "Low Grade Non-Hodgkin Lymphoma" Internal Medicine Resident Block Conference
2015-present	Lecturer: "Lymphoma," Internal Medicine Resident Monthly Rotation Lectures
2015	Preceptor: "Primary Mediastinal B Cell Lymphoma," Internal Medicine Resident Morning Report
2014	Preceptor: "HIV Associated Lymphoma", Internal Medicine Resident Morning Report
2014	Lecturer: "Grant Writing," Hem/Onc Fellowship Conference Lecture Series
2013	Preceptor: "Pure Red Cell Aplasia in a Cirrhotic Patient", Internal Medicine Resident Morning Report
2013	Lecturer: "Chronic Lymphocytic Leukemia," Internal Medicine Resident Block Conference
2009-present	Annual Lecturer: "Transfusion Medicine," Med 4 Medical Therapeutics Course, now Internal Medicine Bootcamp

MentoringGraduate Students

2014 – 2018	Sean Reiff, MD, PhD Candidate The Ohio State University, College of Medicine
2017 –2018	Haley Armstrong, MS Candidate The Ohio State University, College of Pharmacy MS in Pharmaceutical Sciences
2017 – present	Elizabeth Muhowski, PhD Candidate The Ohio State University, College of Pharmacy
2018 – present	Abigail Beer, PhD Candidate, The Ohio State University, College of Arts and Sciences, Molecular Cellular Developmental

Post-Doctoral Fellows

2015 – 2016	Kerry Rogers, Hem/Onc Fellow
2015 – 2016	Sarah Wall, Hem/Onc Fellow
2015 – present	Fabienne Lucas, Laboratory Fellow
2017 – present	David Bond, Hem/Onc Fellow
2018 – present	Shanmugapriya (Priya) Thangavadivel, Laboratory Fellow

Faculty

2016 – present	Kerry Rogers, The Ohio State University
2018 – present	Seema Bhat, The Ohio State University

Undergraduate Students

2015 – 2016	Samantha McWhorter
2017 – 2018	Catherine Fabian
2017 – present	Parviz Kanga

Doctoral Student Committee Membership

Sean Reiff
Giovanna Merchand Reyes
Elizabeth Muhowski
Eric Eisenmann (2019-Present)
Janek Walker (January 2019-Present)

Medical Student and MSTP Programs

2017-present	Sydney Fobare, Longitudinal Preceptorship
2018-present	Steven Sher, MSTP Mentorship Academy
2019-present	Akila Venkataramany, MSTP Mentorship Academy

Grants and Contract AwardsActive:

5 R01 CA197870-03

(PI: Woyach)

07/01/2015 – 06/30/2020

NCI \$228,750

Improving BTK Directed Therapy for CLL

Aim 1: To perform pre-clinical work to support selective BTK inhibition with next-generation BTK inhibitor ACP-196 and this in combination with immunotherapy in CLL. Aim 2: To perform a Phase

Ib study of ACP-196 in combination with obinutuzumab in relapsed and treatment naïve CLL and to evaluate associated pharmacokinetic and pharmacodynamic outcomes. Aim 3: To determine the most promising agents to treat CLL patients with acquired ibrutinib resistance due to C481 *BTK* mutations.

5 R01 CA192928-04 (MPI: Lapalombella/Byrd/Woyach) 04/01/2015 – 03/31/2020

NCI \$332,478

Dual targeting of XPO1 and BTK in B-cell malignancies

Aim 1: To characterize XPO1 export function in CLL. Aim 2: To initiate a Phase I trial of selinexor plus ibrutinib in patients with relapsed and refractory CLL (cohort 1) or aggressive Non- Hodgkin Lymphoma (NHL) (cohort 2).

5 R01 CA183444-05 (MPI: Byrd/ Woyach) 01/01/2014 - 12/31/2019 (NCE)

NCI \$325,510

Molecular Evaluation of Targeted Therapies in Lymphoid Malignancies

This proposal supports the correlative studies for a Phase III clinical trial investigating ibrutinib alone or ibrutinib plus rituximab compared with standard therapy of bendamustine plus rituximab (BR) in older patients with previously untreated CLL.

LLS 6538-18 (MPI: Sampath / Lapalombella) 10/01/2017 – 09/30/2020

Leukemia and Lymphoma Society \$180,018

Novel strategies for the therapy of genomic high risk CLL

Aim 1. Determine the oncogenic role of specific mutant p53 proteins in CLL. Aim 2. Determine the consequence of HSP90 inhibition on the levels of p53 mutants, their downstream signaling and effect on CLL cell survival. Aim 3. Determine the efficacy of targeting mutant p53 using the HSP90 inhibitor, onalespib alone and in combination with ibrutinib in a double transgenic mutant p53 mouse model of progressive CLL (*Eμ-TCL1;p53^{R172H/+}*) to determine the pharmacodynamics of target modulation and therapeutic efficacy.

Role: Co-Investigator

1 UG1 CA233331-01 (PI: Verschraegen) 03/28/2019 -02/28/2025

NCI \$705,076

OSU as a network lead academic participating site for the NCI NCTN

Aim 1: To provide scientific leadership with active participation at various scientific levels of the NCTN (Group Disease Committees, Task Forces, Steering Committees, and other important NCTN think tank committees). Aim 2: To rapidly implement priority NCTN trials, robustly accrue eligible patients with timely tissue and data submission to deepen our knowledge of cancer biology and improve cancer therapies. Aim 3: To provide continued training and career development of junior faculty and actively involve them in NCTN early in their career. Aim 4: To translate the most promising major scientific findings identified in programmatic SPOREs, P50, P01, and R01 grants at OSUCCC into large confirmatory studies that can be addressed by the NCTN.

Role: Co-Investigator

Completed:

5 U10 CA180850-05 (PI: Verschraegen) 03/01/2018 -02/28/2019

NCI \$851,743

OSU as a network lead academic participating site for the NCI NCTN / LAPS Scientific

Leadership

Aim 1: To provide scientific leadership with active participation at various scientific levels of the NCTN (Group Disease Committees, Task Forces, Steering Committees, and other important NCTN think tank committees). Aim 2: To rapidly implement priority NCTN trials, robustly accrue

eligible patients with timely tissue and data submission to deepen our knowledge of cancer biology and improve cancer therapies. Aim 3: To provide continued training and career development of junior faculty and actively involve them in NCTN early in their career. Aim 4: To translate the most promising major scientific findings identified in programmatic SPOREs, P50, P01, and R01 grants at OSUCCC into large confirmatory studies that can be addressed by the NCTN.

Role: Co-Investigator

5 R01 CA177292-05
NCI

(MPI: Byrd / **Woyach**)

04/01/2013 - 03/31/2019
\$348,512

Targeted Therapy for Lymphoid Malignancies

Specific Aims: 1) To perform a phase II clinical trial of ibrutinib in relapsed and refractory CLL.

2) To perform baseline and serial pharmacodynamic (PD) studies in the phase II ibrutinib study to determine if traditional genomic features, select BCR activation markers, and changes in miR marker expression are predictive for clinical response and 2-year PFS. 3) To perform studies derived from samples from patients participating in both this and other single agent ibrutinib trials to determine the biologic features of tumor cells not cleared from the blood by 12 months and pharmacologic strategies for novel combination strategies to eliminate these.

Role: Multiple PI

5 K23 CA178183-05
NCI

(PI: **Woyach**)

09/17/2013 – 08/31/2018
\$160,400

Phase III: Targeted therapies and mechanisms of resistance in Chronic Lymphocytic Leukemia

Specific Aims: 1) To perform a multicenter randomized phase III trial in untreated patients with CLL age 65 and older to determine a) Whether the Btk inhibitor ibrutinib alone or in combination with rituximab produces superior progression free survival (PFS) compared to standard therapy with bendamustine plus rituximab; b) Overall survival (OS) and response rates with these three regimens; c) Crossover rate from standard therapy to ibrutinib upon progression, and outcome after crossover. 2) To perform correlative studies in this ibrutinib trial to evaluate baseline and dynamic markers to determine a) Whether baseline cytogenetic markers, Zap-70 methylation, IgVH mutational status, or select DNA mutations predict outcomes or time to response; b)

Whether eradication of minimal residual disease affects PFS with ibrutinib-based therapies. 3) To evaluate potential resistance mechanisms to ibrutinib in CLL by a) Using the TCL1 mouse model of CLL to generate ibrutinib resistant disease; b) Performing comprehensive genome and gene and miR expression analysis to determine potential resistance mechanisms; and c) Using data generated from mice for targeted evaluation of patients who relapse after ibrutinib.

Role: Scholar

1 K99 CA208017-01
NCI

(PI:Elgamal)

09/05/2016 – 08/31/2018
\$95,735

Targeting BRD4 in Chronic Lymphocytic Leukemia Disease Progression to Richter's Transformation

Aim 1: Determine the role of BRD4 in CLL-to-RT biology and identify a novel gene signature underlying

RT. Aim 2: Evaluate the anti-tumor and immunomodulatory properties of BRD4 inhibition as a therapeutic epigenetic intervention approach for aggressive CLL and RT.

Role: Co-Investigator

Jennifer Woyach, MD
46050-501565

(PI: Lucas,F)

Updated:10/27/20
08/17/2015 – 08/16/2017
\$60,560

OSU Comprehensive Cancer Center
Pelotonia Post-Doc Fellowship

Correction of Immune Defects by Ibrutinib in the Setting of Aging-Related Immune Dysfunction in CLL

Aim 1: To compare immune-cell defects between younger and older CLL patients and aged-matched healthy individuals. Aim 2: To investigate the clinical relevance of immune-cell defects in younger versus older CLL patients on ibrutinib treatment. Aim 3: To investigate mechanisms mediating effects of ibrutinib on immune-cell defects in younger versus older mice with CLL.

Role: Mentor

GRT00042918

(PI: Oakes)

07/01/2016 – 06/30/2017

Leukemia Research Foundation

\$100,000

The Role of EGR in Establishing the Malignant Epigenetic Program in CLL

Aim 1: To elucidate the pathogenic mechanism by which mutant EGR2 proteins aberrantly program leukemic cells through investigation of endogenously engineered EGR2-mutant leukemic cell lines. Aim 2: To examine epigenetic remodeling and the role of the EGR pathway in acquired resistance to ibrutinib in CLL.

Role: Co-Investigator

LLS 6084-12/R6479-15

(PI:Byrd/ Lapalombella)

10/01/2014 - 09/30/2016

Leukemia & Lymphoma Society

\$270,027

Development of KPT-SINE as a New Therapy for CLL and B-Cell Malignancies

The overarching goals of this application are to improve our understanding of the role of XPO1 over-expression in the context of oncogenic signaling important for the pathogenesis and micro environmental homing of chronic lymphocytic leukemia (CLL) and related lymphoproliferative diseases.

Role: Co-Investigator

LLS 5618-13

(PI: **Woyach**)

07/1/2012 - 09/16/2013

Agency: Leukemia and Lymphoma Society Fellow Award

The role of Bruton's Tyrosine Kinase in the Development of Chronic Lymphocytic Leukemia

Goal: Aim 1: To explore the role of Btk in CLL hematopoietic stem cells. Aim 2: To determine the role of BTK in the expansion phase of the CLL clone using murine and human models of this disease

Role: PI

Agency: American Society of Clinical Oncology Conquer Cancer Foundation Young Investigator Award

(PI: **Woyach**)

07/01/2011 – 06/30/2012

Phase II Trial of Carfilzomib in Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma/Prolymphocytic Leukemia

Goal: Aim 1: To perform a Phase I trial of carfilzomib in patients with relapsed or refractory CLL to determine the maximum tolerated dose (MTD) and toxicity of this treatment with special attention to tumor lysis and cytokine release syndrome. Aim 2: To determine whether the pharmacokinetics (PK) of carfilzomib correlate with inhibition of chymotrypsin-like proteasome activity and induction of ATF3/p53 in CLL tumor cells.

Role: PI

Clinical Trial Leadership

Alliance A041202: A Randomized Phase II Study of Bendamustine plus Rituximab versus Ibrutinib plus Rituximab versus Ibrutinib alone in Untreated Older Patients (>65 Years of Age) with Chronic Lymphocytic Leukemia (CLL) (National Study Chair)

OSU-09108: A Phase I Study of Carfilzomib in Patients with Relapsed or Refractory Chronic Lymphocytic Leukemia (CLL)/Small Lymphocytic Lymphoma (SLL)/Prolymphocytic Leukemia (PLL) (IST)

OSU-12224: A Phase 3b, Multicenter, Open-Label, PCI-32765 (Ibrutinib) Long-Term Extension Study (Site PI)

OSU-13031: A Phase II Study of MOR00208 in Combination with Lenalidomide for Patients with Relapsed or Refractory Chronic Lymphocytic Leukemia (CLL)/Small Lymphocytic Lymphoma (SLL) (IST)

OSU-14051: A Phase 2 Open-Label Study of The Efficacy and Safety of ABT 199 (GDC-0199) in Chronic Lymphocytic Leukemia Subjects with Relapse or Refractory to B Cell Receptor Signaling Pathway Inhibitor Therapy (Site PI)

OSU-14087: A Dose Escalation Study of Selinexor (KPT-330), a Selective Inhibitor of Nuclear Export, and Ibrutinib, a Bruton's Tyrosine Kinase Inhibitor, in Patients with Relapsed and Refractory Chronic Lymphocytic Leukemia or Aggressive Non-Hodgkin Lymphoma (IST)

OSU-14099: A Multicenter, Open-Label, Phase 1 Pilot Study of ACP 196 in Combination with ACP-319 in Subjects with Relapsed/Refractory Chronic Lymphocytic Leukemia (Site PI)

OSU-14123: A Phase 1b Study of ACP-196 in Combination with Obinutuzumab for Patients with Relapsed/Refractory or Untreated CLL/SLL/PLL (Single center, PI)

OSU-15299: Chlorambucil plus Obinutuzumab Vs. Acalabrutinib Vs. Acalabrutinib plus Obinutuzumab in Previously Untreated Chronic Lymphocytic Leukemia (CLL) (Site PI)

OSU-16014: Study of Pembrolizumab (MK-3475) in Combination with Dinaciclib (MK-7965) in Hematologic Malignancies (MK-3475-155) (Site PI)

OSU-16045: A Phase II Single Arm Open Label Multicenter Study to Evaluate the Efficacy and Safety of MOR00208 Combined with Idelalisib or Venetoclax in Patients with Relapsed or Refractory CLL/SLL Previously Treated with Bruton's Tyrosine Kinase (BTK) Inhibitor (Site PI, International study co-chair)

OSU-16299: A Phase 1, Open-Label Study of SNX-5422 Added to Ibrutinib in Chronic Lymphocytic Leukemia Subjects with Residual Disease (Single center, PI)

OSU-17111: ARQ 531 in Selected Subjects with Relapsed or Refractory Hematologic Malignancies (Site PI, Multicenter study chair)

OSU-17143: Daratumumab and Ibrutinib for Symptomatic, Treatment-Naïve CLL: A Phase 1b Proof-of-Concept Study (IST)

OSU-15012: Early Intervention Trial of Ibrutinib for Patients with Asymptomatic, High-Risk Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma. (IST)

OSU-17152: A Phase 1, Open-Label, Multicenter Study to Assess the Safety, Tolerability, Pharmacokinetics and Preliminary Antitumor Activity of Ascending Doses of AZD5991 in Subjects with Relapsed or Refractory Haematologic Malignancies. (Site PI)

A041702: A Randomized Phase III Study of Ibrutinib Plus Obinutuzumab Versus Ibrutinib Plus Venetoclax and Obinutuzumab in Untreated Older Patients (\geq 70 Years of Age) with Chronic Lymphocytic Leukemia (CLL)

EA9161: A Randomized Phase III Study of the addition of Venetoclax to Ibrutinib and

Obinutuzumab versus Ibrutinib and Obinutuzumab in Untreated Younger Patients with Chronic Lymphocytic Leukemia (CLL)

OSU 18307: A Phase 1/2 Study of Oral LOXO-305 in Patients with Previously Treated Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma (CLL/SLL) or Non-Hodgkin Lymphoma (NHL)

Patents

2018 - Phospholipase C gamma 2 and resistance associated mutations. Patent number 9885086. Filed 3/20/15, awarded 2/6/18. Inventors: Byrd JC, **Woyach JA**.

2017 - Biomarkers of bruton tyrosine kinase inhibitor resistance. Byrd JC, Johnson AJ, Lozanski G, Lozanski A, **Woyach J**. Filed 10/5/15. Published 10/19/17. Application US20170298446A1

Editorial Services

Ad Hoc Reviewer

Blood

Leukemia

Clinical Leukemia, Lymphoma, and Myeloma

Mini-Reviews in Medicinal Chemistry

Journal of Geriatric Oncology

Cancer Genetics

British Journal of Cancer

Leukemia and Lymphoma

Cancer

Haematologica

PlosOne

Annals of Oncology

Journal of Clinical Oncology

Annals of Internal Medicine

Journal of Clinical Investigation

Blood Advances

Molecular Cancer Therapeutics

Cancer Research

Nature Medicine

New England Journal of Medicine

Cancer Discovery

Guest Editor

Seminars in Oncology April 2016 CLL Edition

Editorial Board

Blood 2017-present

PublicationsPeer Reviewed Journal Articles

(*indicates senior or co-senior author, # indicates co-first author)

1. **Woyach JA**, Kloos RT, Ringel MD, Arbogast D, Collamore M, Zwiebel JA, Grever M, Villalona-Calero M, Shah MH. Lack of therapeutic effect of the histone deacetylase inhibitor vorinostat in patients with metastatic radioiodine-refractory thyroid carcinoma. *Journal of Clinical Endocrinology and Metabolism*. 2008 94(1):164-70.
2. **Woyach JA**, Shah MH. New therapeutic advances in the management of progressive thyroid cancer. *Endocrine Related Cancers*. 2009 16(3):715-31.
3. **Woyach JA**, Lin TS, Lucas MS, Heerema N, Moran ME, Cheney C, Lucas DM, Wei L, Caligiuri MA, Byrd JC. A phase I/II study of Rituximab and Etanercept in patients with chronic lymphocytic leukemia and small lymphocytic lymphoma. *Leukemia*. 2009 23(5):912-8.
4. **Woyach JA**, Heerema NA, Zhao J, McFaddin A, Stark A, Lin TS, Andritsos LA, Blum KA, Flynn JM, Jones JA, Byrd JC. Dic(17;18)(p11.2;p11.2) is a recurring abnormality in chronic lymphocytic leukemia associated with aggressive disease. *British Journal of Haematology*. 2009 Mar;148(5):754-9.
5. **Woyach JA**, Byrd JC. Established Prognostic Markers in Chronic Lymphocytic Leukemia and Use in Clinical Practice. *American Society of Clinical Oncology Education Book*. June 2011.
6. Blum KA, Ruppert AS, **Woyach JA**, Jones JA, Andritsos L, Flynn JM, Rovin B, Villalona-Calero M, Ji J, Phelps M, Johnson AJ, Grever MR, Byrd JC. Risk Factors for Tumor Lysis Syndrome in patients with chronic lymphocytic leukemia treated with the cyclin dependent kinase inhibitor, Flavopiridol. *Leukemia*. 2011 Sep;25(9):1444-51.
7. **Woyach JA**, Ruppert AS, Heerema NA, Peterson BL, Gribben JG, Morrison VA, Rai KR, Larson RA, Byrd JC. Chemoimmunotherapy with Fludarabine and Rituximab Produces Extended Overall Survival and Progression-Free Survival in Chronic Lymphocytic Leukemia: Long-term Follow Up of CALGB Study 9712. *Journal of Clinical Oncology*. 2011 29(10):1349- 55.
8. **Woyach JA**, Byrd JC. Chemotherapy: New FluCam Combination Therapy Has Familiar Limitations. *Nat Rev Clin Oncol*. 2011 Dec6;9(1):14-5.
9. **Woyach JA**, Lozanski G, Ruppert AS, Lozanski A, Blum KA, Jones JA, Flynn JM, Johnson AJ, Grever MR, Heerema N, Byrd JC. Outcome of patients with relapsed or refractory chronic lymphocytic leukemia treated with Flavopiridol: impact of genetic features. *Leukemia*. 2012 Jun;26(6):1442-4
10. Byrd JC, **Woyach JA**, Johnson AJ. Translating PI3K-Delta Inhibitors to the Clinic in Chronic Lymphocytic Leukemia: The Story of CAL-101 (GS1101). *American Society of Clinical Oncology Education Book*. 2012:691-4.
11. **Woyach JA**, Johnson AJ, Byrd JC. The B-cell receptor signaling pathway as a therapeutic target

in CLL. **Blood**. 2012; 120:1175-1184. PMC3418714

12. **Woyach JA**, Ruppert AS, Peterson B, Rai K, Lin TS, Geyer S, Kolitz J, Appelbaum FR, Tallman MS, Belch AA, Morrison VA, Larson RA, Byrd JC. Impact of Age on Outcomes Following Initial Therapy with Chemotherapy and Different Chemoimmunotherapy Regimens in Patients with Chronic Lymphocytic Leukemia (CLL): Results of Sequential CALGB Studies. **J Clin Oncology**. 2013 Feb 1;31(4):440-7.
13. Gupta SV, Hertlein E, Lu Y, Sass EJ, Lapalombella R, Chen TL, Davis ME, **WoyachJA**, Lehman A, Jarjoura D, Byrd JC, Lucas DM. The Proteasome Inhibitor Carfilzomib Functions Independently of p53 to Induce Cytotoxicity and an Atypical NF- κ B Response in Chronic Lymphocytic Leukemia Cells. **Clin Cancer Res**. 2013 May 1;19(9):2406-19.
14. Dubovsky JA, Beckwith KA, Natarajan G, **Woyach JA**, Jaglowski S, Zhong Y, Hessler JD, Liu TM, Chang BY, Larkin KM, Stefanovski MR, Chappell DL, Frizzera FW, Smith LL, Smucker KA, Flynn JM, Jones JA, Andritsos LA, Maddocks K, Lehman AM, Furman R, Sharman J, Mishra A, Caligiuri MA, Satoskar AR, Buggy JJ, Muthusamy N, Johnson AJ, Byrd JC. Ibrutinib is an irreversible molecular inhibitor of ITK driving a Th1 selective pressure in T-lymphocytes. **Blood**. 2013 Oct 10;122(15):2539-49.
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Book Chapters

1. **Woyach JA** and Byrd JC. Chronic Lymphocytic Leukemia. In Jameson, Loscalzo, Kasper et al. eds. *Harrisons Principles of Internal Medicine*. 20th ed. London, UK: McGraw-Hill Education. 2018.
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Selected Abstracts

1. **Woyach JA**, Lucas MS, Heerema NA, Moran M, Lucas DM, Sass EJ, Young D, Caligiuri MA, Byrd JC. Combination Therapy with Etanercept and Rituximab Promotes Durable Remissions in Relapsed Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma. Poster presented American Society of Clinical Oncology Annual Meeting, May,2008.
2. **Woyach JA**, Heerema NA, Zhao J, McFaddin A, Stark A, Lin TS, Andritsos LA, Blum KA, Flynn JM, Jones JA, Byrd JC. Dic(17;18)(p11.2;p11.2) is a recurring abnormality in chronic lymphocytic leukemia associated with aggressive disease. Poster presented American Society of Hematology Annual Meeting, December, 2009
3. **Woyach JA**, Ruppert AS, Heerema NA, Peterson BL, Gribben JG, Morrison VA, Rai KR, Larson RA, Byrd JC. Treatment with Fludarabine and Rituximab Produces Extended Overall Survival (OS) and Progression-Free Survival (PFS) in Chronic Lymphocytic Leukemia (CLL) without Increased Risk of Second Malignancy: Long-Term Follow up of CALGB 9712. Oral presentation American Society of Hematology Annual Meeting, December, 2009.
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- Stefanovski MR, Frizzera FW, Smith LL, Smucker KA, Flynn JM, Jones JA, Andritsos LA, Maddocks K, Lehman A, Furman RR, Sharman J, Mishra A, Caligiuri MA, Buggy JJ, Muthusamy N, Johnson AJ, Byrd JC. Ibrutinib is an irreversible molecular inhibitor of interleukin-2 inducible kinase: expanding therapeutic potential and modulating a Th1 selective pressure in CD4 T-Cells. American Society of Hematology Annual Meeting, December, 2012.
10. **Woyach JA**, Awan FA, Flinn IW, Enoch R, Foster PA, Byrd JC. Final Results of a Phase I study of the Fc Engineered CD19 Antibody XmAb @5574 (MOR00208) in Patients with Relapsed or Refractory Chronic Lymphocytic Leukemia (CLL) or Small Lymphocytic Lymphoma (SLL). Poster presentation American Society of Hematology Annual Meeting, December, 2012.
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22. **Woyach JA**, Awan F, Flinn I, Berdeja JG, Wiley EA, Mansoor S, Huang Y, Lozanski G, Foster PA, Byrd JC. Final Results and Follow-up of a Phase I Study of the Fc Engineered CD19 Antibody XmAb@5574 (aka MOR00208) in Patients with Relapsed or Refractory Chronic Lymphocytic Leukemia (CLL) or Small Lymphocytic Lymphoma (SLL). Poster presentation American Society of Hematology Annual Meeting, December 2014.
23. Guinn D, Ruppert AS, Maddocks KJ, Jaglowski S, Gordon AL, Lin TS, Larson RA, Marcucci G, Hertlein EK, **Woyach JA**, Johnson AJ, Byrd JC. Mir-155 Expression Is Associated with Chemoimmunotherapy Outcome and Is Modulated by Bruton's Tyrosine Kinase Inhibition with Ibrutinib. Poster presentation American Society of Hematology Annual Meeting, December 2014.
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25. Rogers KA, **Woyach JA**, Andritsos LA, Awan F, Blum KA, Flynn JA, Jaglowski S, Lozanski G, Maddocks KJ, Byrd JC, Jones JA. Incidence of Autoimmune Cytopenias (AIC) in Chronic Lymphocytic Leukemia and Small Lymphocytic Lymphoma (CLL/SLL) Patients (pts) Treated with Ibrutinib. Poster presentation 56th American Society of Hematology Annual

26. Hing ZA, Joyce Fung HY, Ranganathan, P, Mitchell S, El-Gamal D, **Woyach JA**, Williams K, Goettl VM, Smith JL, Yu X, Meng X, Sun Q, Cagatay T, MacMillan JB, Lehman AM, Lucas DM, Baloglu E, Shacham S, Kauffman M, Byrd JC, Chook YM, Garzon R, Lapalombella R. Next Generation XPO1 Inhibitor Shows Improved Efficacy and In Vivo Tolerability in Hematologic Malignancies. Oral presentation 57th American Society of Hematology Annual Meeting, December 2015.
27. El-Gamal D, Hing ZA, Mitchell S, LaFollette TD, Brennan PJ, Flynn JM, Jones JA, Awan F, Andritsos LA, Blachly JS, Williams K, Harrington BK, Goettl VM, DVM , **Woyach JA**, Lehman AM, Yu L, Byrd JC, Lapalombella R. A Novel Inhibitor of BET Family Bromodomains Demonstrates In Vivo and In Vitro Potency in B-Cell Malignancies. Oral presentation 57th American Society of Hematology Annual Meeting, December 2015.
28. Bottoni A, Rizzotto L, Lai TH, Mantel R, Smith L, El-Gamal D, Johnson AJ, Lapalombella R, Blachly JS, Byrd JC, **Woyach JA**, Sampath D. Targeting BTK By a microRNA Mechanism in Chronic Lymphocytic Leukemia. Poster presentation 57th American Society of Hematology Annual Meeting, December 2015.
29. Rogers KA, El-Gamal D, Harrington KB, Hing ZA, Goettl MV, Mantel, Smith LL, Yu L, Johnson AJ, Byrd JC, Lapalombella R, **Woyach JA**. The E μ -Myc/TCL1 Transgenic Mouse as a New Aggressive B-Cell Malignancy Model Suitable for Preclinical Therapeutics Testing. Poster presentation 57th American Society of Hematology Annual Meeting, December 2015.
30. Herman SEM, Montraveta A, Niemann CU, Mora-Jensen H, Gulrajani M, Krantz F, Harrington BK, Covey T, Lannutti BJ, Izumi R, Ulrich RG, Byrd JC, Wiestner A, Johnson AJ, **Woyach JA**. The Bruton Tyrosine Kinase (BTK) Inhibitor ACP-196 Demonstrates Clinical Activity in Two Mouse Models of Chronic Lymphocytic Leukemia. Poster presentation 57th American Society of Hematology Annual Meeting, December 2015.
31. Long M, Beckwith KA, Maddocks KJ, Cheney C, **Woyach JA**, Johnson AJ, Muthusamy N, Byrd JC. Ibrutinib Treatment Reduces Both T-Regulatory Cells and B-Regulatory Cell Phenotype in Malignant B Cells in Chronic Lymphocytic Leukemia Patients. Poster presentation 57th American Society of Hematology Annual Meeting, December 2015.
32. **Woyach JA**, Ruppert AS, Awan F, Jones JA, Waymer S, Lozanski G, Muthusamy N, Byrd JC. A Phase II Study of the Fc Engineered CD19 Antibody MOR208 in Combination with Lenalidomide for Patients with Chronic Lymphocytic Leukemia (CLL). Poster presentation 57th American Society of Hematology Annual Meeting, December 2015.
33. Reiff SD, Guinn D, Mantel R, Smith L, Cheney C, Johnson AJ, Byrd JC, **Woyach JA**. Evaluation of the novel Bruton's tyrosine kinase (BTK) inhibitor GDC-0853 in chronic lymphocytic leukemia (CLL) with wild type or C481S mutated BTK. Poster Presentation. American Society of Clinical Oncology Annual Meeting, June 2016.
34. Wendtner C-M, Byrd JC, Eichhorst B, Foa R, Hallek M, Hillmen P, Jager UI, Jurczak W, Keleman P, Laribi K, Munir T, Staber PB, Stilgenbauer S, **Woyach JA**. A phase II study of MOR208 plus idelalisib in patients with relapsed or refractory chronic lymphocytic leukemia (CLL) or small lymphocytic lymphoma (SLL) previously treated with a Bruton's tyrosine kinase inhibitor. Poster Presentation. American Society of Clinical Oncology

35. **Woyach JA**, Hillmen P, Brown JR, Coutre SE, Barr P, O'Brien SM, Barrientos J, Devereux S, Kay Ne, Reddy N, Mulligan S, Tedeschi A, Zhou C, Ninomoto J, James DF, Byrd JC, Burger J. Outcomes of Ibrutinib Therapy By Age in Patients with CLL/SLL: Analyses from Phase 3 Trial Data (RESONATE and RESONATE-2). Poster presentation 58th American Society of Hematology Annual Meeting, December 2016.
36. **Woyach JA**, Ruppert AS, Awan FT, Jones J, Andritsos LA, Waymer S, Lozanski G, Muthusamy N, Byrd JC. MD1 Updated Results from a Phase II Study of the Fc Engineered CD19 Antibody MOR208 in Combination with Lenalidomide for Patients with Chronic Lymphocytic Leukemia (CLL) and Richter's Transformation or Ibrutinib for Patients with Ibrutinib-Resistant Clones. *Presenting Author* for Poster presentation 58th American Society of Hematology Annual Meeting, December 2016.
37. Guisot NES, Best SA, Wright V, Thomason A, **Woyach JA**, Mantel R, McClanahan F, Abet V, Castagna D, Cousin P, Emmerich J, Ho D, Kelly JR, King-Tours J, Lyons K, Muller M, Refuerzo J, Sargent J, Talab F, Bingham M, Phillips C, Armer R. REDX08608, a Novel, Potent and Selective, Reversible BTK Inhibitor with Efficacy and Equivalent Potency Against Wild-Type and Mutant C481S BTK. Poster presentation 58th American Society of Hematology Annual Meeting, December 2016.
38. McClanahan F, Reiff SD, Guinn D, Tran M, Beaver L, McWorther S, Mantel R, Smith LL, Johnson AJ, Byrd JC, **Woyach JA**. Exploring the Functional Relevance of BTK Beyond Chronic Lymphocytic Leukemia (CLL) Cells: BTK Expression in Non-Malignant Immune Cells of the Microenvironment Mediates CLL Development and Progression In Vivo. Oral presentation 58th American Society of Hematology Annual Meeting, December 2016.
39. Jones JA, **Woyach JA**, Awan FT, Maddocks KJ, Whitlow T, Ruppert AS, Byrd JC. Phase 1b Results of a Phase 1b/2 Study of Obinutuzmab, Ibrutinib, and Venetoclax in Relapsed/Refractory Chronic Lymphocytic Leukemia (CLL). Oral presentation 58th American Society of Hematology Annual Meeting, December 2016.
40. Rogers KA, Lehman AM, Cheney C, Goettl VM, Mantel R, Smith LL, Tran M, Johnson AJ, Byrd JC, **Woyach JA**. Inhibitors of Bruton's Tyrosine Kinase Reduce Anti-Red Blood Cell Response in a Murine Model of Autoimmune Hemolytic Anemia. Poster presentation 58th American Society of Hematology Annual Meeting, December 2016.
41. Wiczer TE, Levine LB, Brumbaugh J, Coggins J, Zhao Q, Ruppert AS, McCoy A, Maddocks KJ, Christian BA, Rogers KA, Andritsos L, Jaglowski S, Devine SM, Porcu P, **Woyach JA**, Jones JA, Grever MR, Byrd JC, Awan FT. Management and Outcomes of Atrial Fibrillation in Patients Receiving Ibrutinib for Hematologic Malignancies at a Single Center. Poster presentation 58th American Society of Hematology Annual Meeting, December 2016.
42. Rizzotto L, Bottoni A, Lai TH, Liu C, Yan PS, Ozer HG, Lapalombella R, PhD1, **Woyach JA**, Oakes CC, Blachly JS, Sampath D. Role of Histone Deacetylase-Mediated Gene Silencing in Chronic Lymphocytic Leukemia Progression. Poster presentation 58th American Society of Hematology Annual Meeting, December 2016.
43. Miller CR, Ruppert AS, Heerema NA, Maddocks KJ, Labanowska J, Breidenbach H, Lozanski G, Zhao W, Gordon A, Jones JA, Flynn JM, Jaglowski S, Andritsos LA, Awan FT, Blum KA, Grever MR, Johnson AJ, Abruzzo LV, Hertlein EK, **Woyach JA**, Byrd JC.

- Near-Tetraploidy Is Strongly Associated with Development of Richter's Transformation in Chronic Lymphocytic Leukemia Patients Receiving Ibrutinib. Poster presentation 58th American Society of Hematology Annual Meeting, December 2016.
44. Reiff SD, Mantel R, Smith LL, McWhorter S, Goettl VM, Johnson AJ, Eathiraj S, Abbadessa G, Schwartz B, Byrd JC, **Woyach JA**. The Bruton's Tyrosine Kinase (BTK) Inhibitor ARQ 531 Effectively Inhibits Wild Type and C481S Mutant BTK and Is Superior to Ibrutinib in a Mouse Model of Chronic Lymphocytic Leukemia. Poster presentation 58th American Society of Hematology Annual Meeting, December 2016.
 45. Long M, Beckwith KA, Do P, Lundy B, Gordon A, Lehman AM, Maddocks KJ, Cheney C, Jones J, Andritsos LA, Awan FT, Fraietta JA, June CH, Maus MC, **Woyach JA**, Caligiuri MA, Johnson AJ, Muthusamy N, Byrd JC. Ibrutinib Represents a Novel Class of Immune Modulating Therapeutics That Enhances the Survival of Activated T Cells in Vitro and In Vivo through a Non-BTK Mediated Mechanism. Poster presentation 58th American Society of Hematology Annual Meeting, December 2016.
 46. Heerema NA, Zhao Q, Ruppert AS, Breidenbach H, Jones J, Andritsos LA, **Woyach JA**, Awan FT, Long M, MD, Gordon A, Coombes C, Byrd JC, Muthusamy N. Presence of a Translocation Is Associated with Short Time to Treatment from Diagnosis in IGHV Mutated Chronic Lymphocytic Leukemia (CLL) Patients. Poster presentation 58th American Society of Hematology Annual Meeting, December 2016.
 47. Shindiapina P, Khountham S, Rogers KA, Jones J, Andritsos L, Maddocks KJ, Flynn JM, **Woyach JA**, Byrd JC, Awan FT. Natural History of Non-Infectious, Ibrutinib-Attributable Adverse Events Leading to Alternative BTK Inhibitor Use in CLL. Poster presentation 58th American Society of Hematology Annual Meeting, December 2016.
 48. Pavlik A, Barr H, Dotson E, Byrd JC, Blum KA, Awan FT, **Woyach JA**, Maddocks KJ, Christian BA, Jones JA. Major Bleeding Complications Among Patients Treated with Ibrutinib and Concomitant Antiplatelet, Anticoagulant, or Supplemental Therapy. Poster presentation 58th American Society of Hematology Annual Meeting, December 2016.
 49. Jones JA, Johnson AJ, Awan FT, Zhao Q, Muthusamy N, Maddocks KJ, Andritsos LA, Rogers KA, **Woyach JA**, Lozanski G, Heerema NA, Brookfield C, Ruppert AS, Byrd JC. A Phase 2 Study of Lenalidomide to Repair Immune Synapse Response and Humoral Immunity in Early-Stage, Asymptomatic Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma (CLL/SLL) with High-Risk Genomic Features. Poster presentation 58th American Society of Hematology Annual Meeting, December 2016.
 50. **Woyach JA**, Guinn D, Ruppert AS, Blachly JS, Lozanski A, Heerema NA, Zhao W, Coleman J, Jones D, Abruzzo LV, Gordon A, Mantel R, Smith L, McWhorter S, Davis M, Doong TJ, Ny F, Lucas MS, Chase W, Jones J, Flynn JM, Maddocks KJ, Jaglowski S, Andritsos LA, Awan FT, Blum K, Grever MR, Lozanski G, Byrd J, Johnson A. The Development and Expansion of Resistant Subclones Precedes Relapse during Ibrutinib Therapy in Patients with CLL. Presenting Author in Oral Presentation 58th American Society of Hematology Annual Meeting, December 2016.
 51. Fabian C, Reiff S, Guinn D, Neuman L, Fox J, Wilson W, Byrd JC, **Woyach JA**, Johnson A. SNS-062 demonstrates efficacy in chronic lymphocytic leukemia in vitro and inhibits C481S mutated Bruton tyrosine kinase. (2017 AACR Meeting Abstract) (Poster presentation).

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53. Jones D, **Woyach JA**, Zhao W, Caruthers S, Tu H, Coleman J, Byrd JC, Johnson A, Lozanski G. PLCG2 C2-domain mutations co-occur with BTK and PLCG2 resistance mutations in chronic lymphocytic leukemia undergoing treatment with the BTK inhibitor ibrutinib. (2017 AACR Meeting Abstract) (Poster presentation).
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56. Rogers KA, Huang Y, Stark A, Awan FT, Maddocks KJ, **Woyach JA**, Whitlow T, Byrd JC, Jones JA. Initial Results of the Phase 2 Treatment Naive Cohort in a Phase 1b/2 Study of Obinutuzumab, Ibrutinib, and Venetoclax in Chronic Lymphocytic Leukemia. Blood 2017 130 (Suppl 1):431, Oral Presentation, 59th Annual American Society of Hematology Meeting, Atlanta, GA, December 2017.
57. Rogers KA, Luay M, Zhao Q, Wiczer T, Levine L, El Boghdady Z, Blachly JS, Byrd JC, Guerrero T, Jones JA, Polina S, Sigmund A, Sullivan M, Awan FT, **Woyach JA**. Incidence and Type of Opportunistic Infections during Ibrutinib Treatment at a Single Academic Center. Blood 2017 130 (Suppl 1):830, Oral Presentation, 59th Annual American Society of Hematology Meeting, Atlanta, GA, December 2017.
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59. Rogers KA, Huang Y, Dotson E, Lundberg J, Andritsos L, Awan FT, Jones JA, **Woyach JA**, Byrd JC. Single-Institutional Experience with the Use of PD-1 Inhibitors for the Treatment of Richter's Syndrome. Blood 2017 130 (Suppl 1):5345-5345. Abstract Book Publication, 59th Annual American Society of Hematology Meeting, Atlanta, GA, December 2017.
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62. Sigmund A, Huang Y, Ruppert AS, Ny F, Lucas M, Chase W, Maddocks KJ, Rogers KA, Jaglowski SM, Andritsos LA, Awan FT, Grever MR, Byrd JC, **Woyach JA**. Depth of response and progression free survival in CLL patients on ibrutinib. J Clin Oncol 36, 2018 (suppl; abstr 7514). Poster Board #151/Abstract 7514. Session: Hematologic Malignancies—Lymphoma and Chronic Lymphocytic Leukemia, Poster Discussion Session, ASCO Annual Meeting, Chicago, IL, June 2018.
63. Rogers KA, Huang Y, Ruppert AS, Civils T, Das S, Fedor C, Whitlow WT, Awan FT, Maddocks KJ, **Woyach JA**, Jones JA, Byrd JC. Change in tumor lysis syndrome risk after lead-in treatment in a phase 1b/2 study of obinutuzumab, ibrutinib, and venetoclax for chronic lymphocytic leukemia. J Clin Oncol 36; 2018 Suppl. Abstract #7528. ASCO Annual Meeting, Chicago, IL, June 2018.
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65. Byrd JC, **Woyach JA**, Furman RR, Martin P, O'Brien SM, Brown JR, Stephens DM, Barrientos JC, Devereux S, Hillmen P, Pagel JM, Chen D, Hamdy A, Izumi R, Patel P, Wang MH, Jain N, Wierda WG. Acalabrutinib in Treatment-Naive (TN) Chronic Lymphocytic Leukemia (CLL): Updated Results from the Phase 1/2 ACE-CL-001 Study. Blood 2018 132:692; Oral Presentation, 60th Annual American Society of Hematology Meeting, San Diego, CA, December 2018.
66. Rogers KA, Huang Y, Ruppert AS, Awan FT, Hoffman C, Maddocks KJ, Reid M, **Woyach JA**, Whitlow T, Jones JA, Byrd JC. Phase 2 Study of Combination Obinutuzumab, Ibrutinib, and Venetoclax in Treatment-Naive and Relapsed/Refractory Chronic Lymphocytic Leukemia. Blood 2018 132:693; Oral Presentation, 60th Annual American Society of Hematology Meeting, San Diego, CA, December 2018.
67. Jones D, Tu H, **Woyach JA**, Rogers KA, Pan X, Long S, Sisson B, Caruthers S, Ru P, Heerema NA, Lozanski G, Abruzzo LV, Zhao W, Byrd JC. Mutations in the Ras Pathway in Pre-Treatment Chronic Lymphocytic Leukemia Are Associated with VH1-69: Linking B-Cell Receptor Stereotypy to Downstream Signaling Events. Blood 2018 132:1845; Poster Presentation, 60th Annual American Society of Hematology Meeting, San Diego, CA, December 2018.
68. **Woyach JA**, Flinn IW, Stephens DM, Awan FT, Rogers KA, Reiff SD, Savage RE, Eathiraj S, Szuszkiewicz LA, Tith K, Byrd JC. A Phase 1 Dose Escalation Study of ARQ 531 in Selected Patients with Relapsed or Refractory Hematologic Malignancies. Blood 2018 132:3136; *Presenting Author*, Poster Presentation, 60th Annual American Society of Hematology Meeting, San Diego, CA, December 2018.
69. Kander E, Zhao Q, Wiczer T, Byrd JC, **Woyach JA**, Awan FT, Rogers KA, Wang T.

- Incidence, Type, and Management of Venous and Arterial Thrombosis during Ibrutinib Treatment. *Blood* 2018 132:3148; Poster Presentation, 60th Annual American Society of Hematology Meeting, San Diego, CA, December 2018.
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 71. Dickerson T, Wiczer T, Waller A, Philippon J, Haddad D, Guha A, Porter K, Rogers KA, **Woyach JA**, Byrd JC, Addison D, Awan FT. Hypertension Development, Management, and Cardiovascular Events Following Ibrutinib Initiation for Hematologic Malignancies. *Blood* 2018 132:4423; Poster Presentation, 60th Annual American Society of Hematology Meeting, San Diego, CA, December 2018.
 72. Staber PB, Chanan-Khan AA, Munir T, Niederweiser D, Schetelig J, Middeke JM, Dirnberger-Hertweck M, Kelemen P, Weirather J, Parikh SA, Stilgenbauer S, Wendtner C, **Woyach JA**. Two-Cohort Phase II Study in R/R CLL (COSMOS): First Preliminary Safety and Efficacy Results of Anti-CD19 MOR208 Treatment in Combination with Venetoclax in Patients Who Discontinued Prior BTK Inhibitor Therapy. *Blood* 2018 132:4433; Poster Presentation, 60th Annual American Society of Hematology Meeting, San Diego, CA, December 2018.
 73. Barr PM, Munir T, Brown JR, O'Brien SM, Barrientos JC, Reddy NM, Coutre S, TamCSL, Mulligan SP, Jäger U, Kipps TJ, Moreno C, Montillo M, Burger JA, Byrd JC, Hillmen P, Dai S, Szoke A, Dean JP, **Woyach JA**. Final analysis from RESONATE: Six-year follow-up in patients (pts) with previously treated chronic lymphocytic leukemia or small lymphocytic lymphoma (CLL/SLL) on ibrutinib. *J Clin Oncol* 37, 2019 Suppl; abstr 7510 Poster Discussion Session. ASCO Annual Meeting, Chicago, IL, June 2019.
 74. Bond DA, Huang Y, Fisher JL, Ruppert AS, Owen DH, Bertino EM, Rogers KA, BhatSA, Jaglowski SM, Grever MR, Byrd JC, Maddocks KJ, **Woyach JA**. Second cancer incidence in CLL patients receiving BTK inhibitors. *J Clin Oncol* 37, 2019 Suppl; abstr 7511 Poster Discussion Session. ASCO Annual Meeting, Chicago, IL, June 2019.
 75. **Woyach JA**, Rogers KA, Bhat SA, Blachly JS, Jianfar M, Frigault MM, Hamdy AM, Izumi R, Munugalavadla V, Quah CS, Wang MH, Byrd JC. Acalabrutinib with obinutuzumab (Ob) in treatment-naïve (TN) and relapsed/refractory (R/R) chronic lymphocytic leukemia (CLL): Three-year follow-up *J Clin Oncol* 37, 2019 Suppl; abstr 7500 ASCO Annual Meeting, Chicago, IL, June 2019.
 76. **Woyach JA**, Thangavadivel S, Weiss D, Wei L, McLaughlin E, Rogers K, Bhat SA, Grever M, Keller M, Dort M, Lozanski G, Andersen B, Byrd JC, Awan FT. Final Results of a Phase 2 Trial of Early Intervention Ibrutinib with Vaccinations in Patients with Asymptomatic, High-Risk CLL. *Blood* 2019 642:1759. Poster Presentation, 61st Annual American Society of Hematology Meeting, Orlando, Florida, December 2019.
 77. **Woyach JA**, Ruppert AS, Perez G, Booth AM, Feldman D, Dib EG, Jatoi A, Le-Rademacher J, Heerema NA, Lozanski G, Little R, Ding W, Hill BT, Sonte RM, Mandrekar SJ, Byrd JC. Alliance A041702: A Randomized Phase III Study of Ibrutinib Plus Obinutuzumab Versus Ibrutinib Plus Venetoclax and Obinutuzumab in Untreated Older Patients (≥ 70 years of age) with Chronic Lymphocytic Leukemia (CLL). *Blood* 2019 642:1751. Poster Presentation, 61st Annual American Society of Hematology Meeting,

78. **Woyach JA**, Huang Y, Rogers K, Bhat S, Grever M, Lozanski A, Doong TJ, Blachly JS, Lozanski G, Jones D, Byrd JC. Resistance to Acalabrutinib in CLL is Mediated Primarily by BTK Mutations. Blood 2019 642:504. Poster Presentation, 61st Annual American Society of Hematology Meeting, Orlando Florida, December 2019.

Invited Presentations

International

1. "BTK Inhibitors vs Chemoimmunotherapy as Initial Treatment for CLL", Lymphoma, Leukemia, and Myeloma Congress: An International Congress on Hematologic Malignancies, Virtual, October 2020.
2. "Cardio-Oncology in the Era of COVID-19: a Trans-Continental Perspective", IC-OS Covid and Cardio Oncology Webinar, Virtual, September 2020.
3. "B-Cell Receptor Resistance", Session 2: Clonal Evolution and Resistance Mechanisms, iwCLL Annual Conference, Edinburgh, Scotland, September 2019.
4. "Who Are The 40% Of Patients Who Are Discontinuing Ibrutinib In Relapsed / Refractory CLL," II Symposium in Hematologic Oncology, Sao Paulo, Brazil, March 2019.
5. " 'Double Trouble': Emerging Biologic Combinations in First and Second Line CLL Treatments," II Symposium in Hematologic Oncology, Sao Paulo, Brazil, March 2019.
6. "How Has the Management of High Risk CLL Evolved Over the Years," II Symposium in Hematologic Oncology, Sao Paulo, Brazil, March 2019.
7. "Update on First Line Management on CLL," 8th Canadian Hematology Conference (CHC 2018), Toronto, Ontario, Canada, September 2018.
8. "Resistance to BTKi," 14th Canadian CLL Research Meeting, Winnipeg, Manitoba, Canada, September 2018.
9. "Mutations and Resistance to Small Therapeutic Molecules; a Growing Clinical Problem Onwards," Nordic CLL Study Group's Nordic Educational Meeting on CLL: What Every Hematologist Should Know about CLL in 2018, Stockholm, Sweden, April 2018.
10. "Novel Therapies in CLL," British Society of Haematology Annual Scientific Meeting, Liverpool, UK, April 2018.
11. "New Agents in Chronic Lymphocytic Leukemia" German CLL Study Group's Xth International Workshop, Cologne, Germany, September 2016.
12. "Novel BTK Inhibitors in CLL" 12th Annual Canadian CLL Research Meeting, Winnipeg, Manitoba, September 2016.
13. "The management of elderly patients with Chronic Lymphocytic Leukemia using systemic therapy," CME/CE Webinar, February 2015.
14. "Treatment of CLL, Novel Therapies," Society of Geriatric Oncology CLL in the Elderly Task Force, Paris, France, January 2015.
15. "Moving Toward the Optimal Therapy for Older Adults with CLL", Atlantic Hematology Symposium Halifax, NS, October 2014.
16. "Management of CLL in the Elderly", Canadian Hematology Conference, Toronto, ON, September 2014.
17. "Importance of BTK function to development and expansion of CLL", Practical and Emerging Trends in Multiple Myeloma, Whistler, BC (session moderator), March, 2014.
18. "Which patient is appropriate for monotherapy vs. combination therapy with B-cell

signaling inhibitors”, Practical and Emerging Trends in Chronic Lymphocytic Leukemia, Whistler, BC, March 2014.

National

1. “Expert Perspectives on Incorporating BTK Inhibitors into Best Clinical Practice in CLL”, Plexus, Southern Arizona VA, Webinar, August 2020.
2. “The Expanding Role of BTK Inhibitors for the treatment of patients with CLL”, Bio Ascend Grand Rounds Community Program, Webinar, August 2020.
3. “Expert Perspectives on Incorporating BTK Inhibitors into Best Clinical Practice in CLL”, Plexus, Loma Linda VA, Webinar, July 2020.
4. “Managing the Costs of CLL Treatment”, Patient Power, Webinar, July 2020.
5. “Chronic Lymphocytic Leukemia: What are my treatment options?” Lymphoma and Leukemia Society, Webinar, May 2020
6. "New Advances In Chronic Lymphocytic Leukemia", Hematology Grand Rounds, University of Miami Health System/Sylvester Cancer Center, Miami, FL, May 2020.
7. “Evolving Management of Frontline CLL”, Hematology Research Conference, University of Utah Medical Center, Salt Lake City, Utah, February2020.
8. “Resistance to targeted therapies in CLL”, Pharmacology and Chemical Biology Departmental Seminar, Baylor University College of Medicine, Houston, TX, January 2020.
9. “Resistance to Targeted Therapies in CLL”, Department of Pathology and Immunology Grand Rounds, Washington University in St. Louis School of Medicine, St. Louis, Missouri, January 2020
10. “Response Comes of Age in Chronic Lymphocytic Leukemia.” 61st Annual American Society of Hematology Meeting. Orlando, Florida, December 2019.
11. “MRD Testing to Guide Treatment Decisions in CLL”, 61st American Society of Hematology Meeting, Orlando, Florida, December 2019.
12. “Emerging Strategies for Management of CLL”, Plexus, Cincinnati VA Hospital, December 2019.
13. Evolving Front-Line Therapy in Chronic Lymphocytic Leukemia, Emil J Freireich Hematology Grand Rounds. The University of Texas, MD Anderson Cancer Center. Houston, Texas, November 2019.
14. “Novel Agents in Elderly CLL Patients: Should Approach be Different?” Imedex Myeloma and Lymphoma Congress. New York, NY, October2019.
15. “Next Generation Small Molecules”, Chronic Lymphocytic Leukemia Session, SOHO 2019 Annual Meeting, Houston, TX, September2019
16. “Chronic Lymphocytic Leukemia: How to Treat in 2019,” Main Symposium Session, 16th Annual Indy Hematology Review, Indianapolis, IN, March2019
17. “Chronic Leukemias,” Nursing Symposium Session, 16th Annual Indy Hematology Review, Indianapolis, IN, March 2019
18. “Evolving Front-Line Therapy in Chronic Lymphocytic Leukemia,” MayoClinic Division of Hematology CME Conference, Rochester, MN, February2019
19. “Ibrutinib Alone or in Combination with Rituximab Produces Superior Progression Free Survival (PFS) Compared with Bendamustine Plus Rituximab in Untreated Older Patients with Chronic Lymphocytic Leukemia (CLL): Results of Alliance North American Intergroup Study A041202.” Plenary Scientific Session: Abstract. The 61st American

- Society of Hematology Annual Meeting, San Diego, CA. December 2018.
20. "Resistance to Targeted Therapies in Chronic Lymphocytic Leukemia," Distinguished Lecture Series in Experimental Therapeutics at M.D. Anderson Cancer Center, Houston, TX, November 2018
 21. "Resistance to Targeted Therapies in Chronic Lymphocytic Leukemia," Association for Molecular Pathology (AMP) 2018 Annual Meeting & Expo, San Antonio, TX, November 2018
 22. A041702 I/O 'vs' IVO v I in older CLL," Leukemia/Leukemia Correlative Sciences Meeting at the Alliance for Clinical Trials in Oncology 2018 Fall Alliance Group Meeting, Rosemont, IL, November 2018
 23. "I/O 'vs' ibrutinib/obino/venet in older CLL (Study#:A041702)," Leukemia/Leukemia Correlative Sciences Meeting at the Alliance for Clinical Trials in Oncology 2018 Spring Alliance Group Meeting, Rosemont, IL, May 2018
 24. "New Opportunities in Treatment for CLL," ECOG-ACRIN Spring Meeting, Hematologic Malignancies Summary Session, Leukemia, Lymphoma & Myeloma Committees, Chicago, IL, May 2018
 25. "Ibrutinib Resistance in CLL," Genetech Webinar Presentation, February 2018
 26. "What's New in CLL," 2017 Lymphoma Study Group/Hematology Highlights: A Post ASH Review, Omaha, NE, February 2017
 27. "Investigator Responsibilities and Collaboration between Clinical and PhD Investigators," 58th Annual American Society of Hematology Meeting, Trainee Day Didactic Session 1, San Diego, CA, December 2016
 28. "Bruton's Tyrosine Kinase Inhibition in Chronic Lymphocytic Leukemia: Current Status and Future Directions," Weill-Cornell Medicine Hematology/Medical Oncology Grand Rounds, New York, NY, November 2016
 29. "BCR Inhibitors Have Unique Toxicities," Society of Hematologic Oncology (SOHO 2016) (session moderator and presenter). Houston TX, September 2016
 30. "Approaches for Patients With CLL and Dell 7p," Society of Hematologic Oncology (SOHO 2016), Houston TX, September 2016
 31. "Collaborative Approach to CLL Management," 2016 Pan Pacific CLL Conference, Koloa, HI, July 2016
 32. "Therapy for Relapsed/Refractory CLL," PeerView satellite symposium at the 2016 Pan Pacific CLL Conference, Koloa, HI, July 2016
 33. "Therapy for Relapsed/Refractory CLL," Physicians Education Resource Satellite Symposium at the 2016 Pan Pacific CLL Conference, Koloa, HI, July 2016
 34. "SLL and CLL – Same Disease, Same Approach?" 2016 Pan Pacific CLL Conference, Koloa, HI, July 2016
 35. "B Cell Receptor Signaling in Chronic Lymphocytic Leukemia: Current and Future Directions." Education Program. American Association of Cancer Research, New Orleans, Louisiana, April 2016.
 36. "Strategies for Management of Chronic Lymphocytic Leukemia," NCCN Tumor Board Webinar, Columbus, Ohio, April 25, 2016.
 37. "Targeting Intracellular Pathways in Chronic Lymphocytic Leukemia," 14th International Congress on Targeted Anticancer Therapies (TAT 2016), Washington, DC, March 21, 2016.
 38. "Patterns of Resistance to B-Cell Receptor Pathway Antagonists in Chronic Lymphocytic Leukemia and Strategies for Management" Education Program, American Society of Hematology Annual Meeting, Orlando, Florida, December 2015.
 39. "Discontinuation of the BTK Inhibitor Ibrutinib in CLL: Etiologies and Outcomes." Biology of Aging Workshop, American Society of Hematology Annual Meeting,

- Orlando, Florida, December 2015
40. "Early Detection of Acquired Resistance to Ibrutinib." Alliance for Clinical Trials in Oncology Fall Group Meeting. November, 2015
 41. "Acquired Resistance to Ibrutinib: Current Progress and Challenges." MD Anderson Cancer Center Leukemia Grand Rounds, Houston, TX, October,2015.
 42. "Discontinuation of Ibrutinib in CLL," CLL Research Consortium Meeting,December 2014.
 43. "Biology of aging and chronic lymphocytic leukemia," Biology of Aging Workshop, American Society of Hematology Annual Meeting, San Francisco, CA, December, 2014
 44. "Changing the Therapeutic Landscape of CLL", Hematological Symposium, Charleston, SC, October 2014.
 45. "Latest Developments in Chronic Lymphocytic Leukemia: an NCCN Grand Rounds in the Community Series". University of Pennsylvania Medical Center, Pittsburgh, PA, August 2014.
 46. "Chronic Lymphocytic Leukemia", Highlights of ASH North America,Atlanta,GA, January, 2014
 47. "Chronic Lymphocytic Leukemia", Highlights of ASH North America,Miami,FL, January 2014
 48. "Acquired Resistance to Ibrutinib in Chronic Lymphocytic Leukemia," Lymphoma Committee Meeting, Alliance for Clinical Trials in Oncology Fall Meeting, Chicago, IL, November 2013.
 49. "Advances in Chronic Lymphocytic Leukemia," Nebraska Oncology Society,Omaha, NE, September 2013
 50. "Inhibition of BTK: A Promising New Approach," Physician Education Resources Targeted Therapies Congress, Washington, D.C., August2013
 51. "Global Inhibition of Bruton's Tyrosine Kinase (BTK) Delays the Development and Expansion of Chronic Lymphocytic Leukemia (CLL) in the TCL1 Mouse Model of Disease," Chronic Lymphocytic Leukemia Research Consortium Spring Meeting, San Diego, CA, April 2013
 52. "Global Inhibition of Bruton's Tyrosine Kinase (BTK) Delays the Development and Expansion of Chronic Lymphocytic Leukemia (CLL) in the TCL1 Mouse Model of Disease," Leukemia Correlative Science Committee Meeting, Alliance for Clinical Trials in Oncology Spring Meeting, Chicago, IL, March2013
 53. "Impact of Age on Outcomes Following Initial Therapy with Various Chemotherapy and Chemoimmunotherapy Regimens in Patients with Chronic Lymphocytic Leukemia (CLL): Results of CALGB Studies," Leukemia Committee Meeting, Alliance for Clinical Trials in Oncology Spring Meeting, Chicago, IL, March 2012
 54. "Treatment with Fludarabine and Rituximab Produces Extended Overall Survival (OS) and Progression-Free Survival (PFS) in Chronic Lymphocytic Leukemia (CLL) without Increased Risk of Second Malignancy: Long-Term Follow up of CALGB 9712," Leukemia Committee Meeting, Cancer and Leukemia Group B Fall Meeting, Chicago, IL, November 2009

Local

1. "Opinions in CLL: An Interactive Local Workshop", Webinar, Columbus, OH, October 2020.
2. "Personal Early Career Growth", PGY3 Professional and Personal Growth in Early Career, The Ohio State University, October 2020.
3. "Covid-19 in Hematologic Malignancies" Panel, The Ohio State University 2020 Hematology Symposium, September 2020.

4. "Resistance to Targeted Therapies in CLL", The Ohio State University Comprehensive Cancer Center Grand Rounds, January, 2020.
5. "Evolving Frontline Therapy for Chronic Lymphocytic Leukemia," The Ohio State University Comprehensive Cancer Center Grand Rounds, February15,2019.
6. "Chronic Lymphocytic Leukemia," Ohio State's 2018 ASH Review, ColumbusOH, January 2018
7. "Chronic Lymphocytic Leukemia," Ohio State's 2017 ASH Review, ColumbusOH, January 2017
8. "How to Build a Successful Research Program as a Clinician," The Ohio State University, Columbus, OH, April 2016
9. "CLL," The Ohio State University Wexner Medical Center's 2015 ASH Review, Columbus, OH, December, 2014
10. "HDACi mediated strategies to inhibit BTK and overcome ibrutinib resistance,"The Ohio State University Research Faculty Meeting, Columbus,OH, October 2014
11. "Chronic Lymphocytic Leukemia Updates", Blood Cancer Conference Leukemia and Lymphoma Society, Cincinnati, OH, April, 2014
12. "What's New in Chronic Lymphocytic Leukemia," American Society of Hematology Annual Meeting Review, The Ohio State University, Columbus, OH,February 2013
13. "Chronic Lymphocytic Leukemia," The Ohio State University Cytogenetics Laboratory Educational Session, The Ohio State University, Columbus, OH, June 2012