

# **Consensus or Controversy? Clinical Investigators Provide Perspectives on the Current and Future Care of Patients with Chronic Lymphocytic Leukemia**

**Sunday, June 1, 2025**

**7:00 AM – 8:00 AM CT (8:00 AM – 9:00 AM ET)**

## **Faculty**

**Catherine C Coombs, MD  
William G Wierda, MD, PhD**

## **Moderator**

**Neil Love, MD**

# Faculty



**Catherine C Coombs, MD**

Associate Clinical Professor  
Division of Hematology/Oncology  
Department of Medicine  
UCI Health  
Orange County, California



**MODERATOR**

**Neil Love, MD**

Research To Practice  
Miami, Florida



**William G Wierda, MD, PhD**

Jane and John Justin Distinguished Chair in Leukemia  
Research in Honor of Dr Elihu Estey  
Section Chief, Chronic Lymphocytic Leukemia  
Center Medical Director  
Department of Leukemia, Division of Cancer Medicine  
Executive Medical Director, Inpatient Medical Services  
The University of Texas MD Anderson Cancer Center  
Houston, Texas

# Contributing Faculty



**John N Allan, MD**

Associate Professor of Clinical Medicine  
Weill Cornell Medicine  
New York, New York



**Jeff Sharman, MD**

Medical Director of Hematology Research  
Sarah Cannon Research Institute at  
Willamette Valley Cancer Center  
Eugene, Oregon



**Matthew S Davids, MD, MMSc**

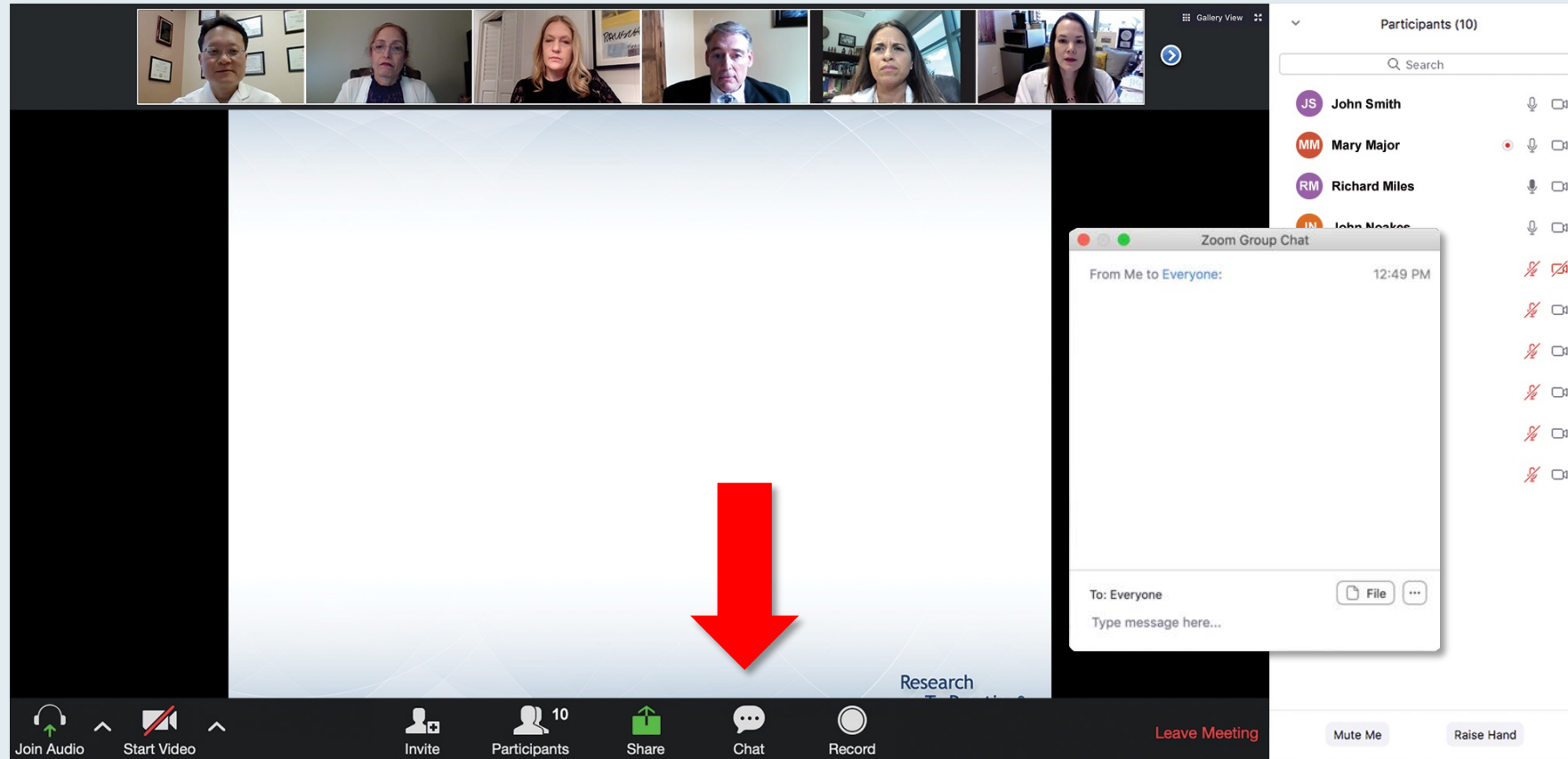
Associate Professor of Medicine  
Harvard Medical School  
Leader, Lymphoma Program  
Dana-Farber/Harvard Cancer Center  
Director of Clinical Research  
Division of Lymphoma  
Dana-Farber Cancer Institute  
Boston, Massachusetts



**Tanya Siddiqi, MD**

Medical Director of Lymphoma  
City of Hope Orange County  
Professor  
Department of Hematology and Hematopoietic  
Cell Transplantation  
Director, Chronic Lymphocytic Leukemia Program  
City of Hope  
Duarte, California

# We Encourage Clinicians in Practice to Submit Questions



Feel free to submit questions now before the program begins and throughout the program.

# Clinicians in the Audience, Please Complete the Pre- and Postmeeting Surveys

The screenshot shows a Zoom meeting window. At the top, a row of seven participant video thumbnails is visible. The main content area on the left displays a presentation slide with the following text:   
**Meet The Professionals**  
**Optimizing the Selection and Timing of Therapy for Patients with Gastrointestinal Cancer**  
Wednesday, August 25, 2022  
5:00 PM – 6:00 PM EST  
Faculty  
Wells A Messersmith, MD  
Moderator  
Neil Love, MD  
The RTP Research to Practice logo is in the bottom right corner of the slide. A 'Quick Survey' pop-up window is centered over the slide, listing several treatment combinations with radio button options. To the right of the main window is a 'Participants (10)' sidebar showing a list of names with their respective status icons (microphone, video, chat). At the bottom of the window is a Zoom toolbar with icons for Join Audio, Start Video, Invite, Participants, Share, Chat, Record, and a red 'Leave Meeting' button.

**Quick Survey**

- ☐ Ceritinib +/- dexamethasone
- ☐ Pomalidomide +/- dexamethasone
- ☐ Ceritinib + pomalidomide +/- dexamethasone
- ☐ Elotuzumab + lenalidomide +/- dexamethasone
- ☐ Elotuzumab + pomalidomide +/- dexamethasone
- ☐ Daratumumab + lenalidomide +/- dexamethasone
- ☐ Daratumumab + pomalidomide +/- dexamethasone
- ☐ Daratumumab + bortezomib +/- dexamethasone
- ☐ Isaxozim + Rd
- ☐ Other

Submit

**Participants (10)**

- JS John Smith
- MM Mary Major
- RM Richard Miles
- JN John Noakes
- AS Alice Suarez
- JP Jane Perez
- RS Robert Stiles
- JF Juan Fernandez
- AK Ashok Kumar
- JS Jeremy Smith

The screenshot shows a Zoom meeting window. At the top, a row of seven participant video thumbnails is visible. The main content area on the left displays a presentation slide with the following text:   
**Regulatory and reimbursement issues aside, which treatment would you recommend for a 65-year-old patient with clear cell renal cell carcinoma (ccRCC) who has been on a tyrosine kinase inhibitor (TKI) for 3 years and is found to have asymptomatic (PS 0) disease?**  
1. Nivolumab/ipilimumab  
2. Avelumab/axitinib  
3. Pembrolizumab/axitinib  
4. Pembrolizumab/lenvatinib  
5. Nivolumab/cabozantinib  
6. Tyrosine kinase inhibitor (TKI) monotherapy  
7. Anti-PD-1/PD-L1 monotherapy  
8. Other  
The RTP Research to Practice logo is in the bottom right corner of the slide. A 'Quick Poll' pop-up window is centered over the slide, listing the same eight options with radio button selection. To the right of the main window is a 'Participants (10)' sidebar showing a list of names with their respective status icons. At the bottom of the window is a Zoom toolbar with icons for Join Audio, Start Video, Invite, Participants, Share, Chat, Record, and a red 'Leave Meeting' button.

**Quick Poll**

- ☐ Nivolumab/ipilimumab
- ☐ Avelumab/axitinib
- ☐ Pembrolizumab/axitinib
- ☐ Pembrolizumab/lenvatinib
- ☐ Nivolumab/cabozantinib
- ☐ Tyrosine kinase inhibitor (TKI) monotherapy
- ☐ Anti-PD-1/PD-L1 monotherapy
- ☐ Other

Submit

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- JP Jane Perez
- RS Robert Stiles
- JF Juan Fernandez
- AK Ashok Kumar
- JS Jeremy Smith



Friday May 30	<b>Immunotherapy and Antibody-Drug Conjugates in Lung Cancer</b> 11:15 AM – 12:45 PM CT (12:15 PM – 1:45 PM ET)
	<b>Colorectal Cancer</b> 6:30 PM – 8:30 PM CT (7:30 PM – 9:30 PM ET)
	<b>EGFR Mutation-Positive Non-Small Cell Lung Cancer</b> 6:30 PM – 8:30 PM CT (7:30 PM – 9:30 PM ET)
Saturday May 31	<b>Urothelial Bladder Cancer</b> 6:45 AM – 7:45 AM CT (7:45 AM – 8:45 AM ET)
	<b>Non-Hodgkin Lymphoma</b> 7:00 PM – 9:00 PM CT (8:00 PM – 10:00 PM ET)
	<b>Prostate Cancer</b> 7:00 PM – 9:00 PM CT (8:00 PM – 10:00 PM ET)
Sunday June 1	<b>Chronic Lymphocytic Leukemia (Webinar)</b> 7:00 AM – 8:00 AM CT (8:00 AM – 9:00 AM ET)
	<b>HER2-Positive Gastrointestinal Cancers</b> 7:00 PM – 8:30 PM CT (8:00 PM – 9:30 PM ET)
	<b>Ovarian and Endometrial Cancer</b> 7:00 PM – 9:00 PM CT (8:00 PM – 10:00 PM ET)
Monday June 2	<b>Renal Cell Carcinoma (Webinar)</b> 7:00 AM – 8:00 AM CT (8:00 AM – 9:00 AM ET)
	<b>Multiple Myeloma (Webinar)</b> 6:00 PM – 7:00 PM CT (7:00 PM – 8:00 PM ET)
	<b>Metastatic Breast Cancer</b> 7:00 PM – 9:00 PM CT (8:00 PM – 10:00 PM ET)
Tuesday June 3	<b>Soft Tissue Sarcoma and Other Connective Tissue Neoplasms (Webinar)</b> 7:00 AM – 8:00 AM CT (8:00 AM – 9:00 AM ET)

# **Consensus or Controversy? Clinical Investigators Provide Perspectives on the Current and Future Care of Patients with Chronic Lymphocytic Leukemia**

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William G Wierda, MD, PhD**

## **Moderator**

**Neil Love, MD**

# Dr Coombs — Disclosures Faculty

<b>Advisory Committees</b>	AbbVie Inc, Allogene Therapeutics, AstraZeneca Pharmaceuticals LP, BeiGene Ltd, Bristol Myers Squibb, Genentech, a member of the Roche Group, Janssen Biotech Inc, Lilly, MingSight Pharmaceuticals, Pharmacyclics LLC, an AbbVie Company
<b>Consulting Agreements</b>	AbbVie Inc, AstraZeneca Pharmaceuticals LP, BeiGene Ltd, Lilly, Octapharma
<b>Contracted Research</b>	AbbVie Inc, BeiGene Ltd, Carna Biosciences, Lilly
<b>Speakers Bureaus</b>	AbbVie Inc, AstraZeneca Pharmaceuticals LP, BeiGene Ltd, Genentech, a member of the Roche Group, Lilly
<b>Stock Options/Stock — Public Companies</b>	Geron Corporation, Pfizer Inc



# Dr Wierda — Disclosures

## Faculty

<b>Consulting Agreements</b>	BeiGene Ltd, Numab Therapeutics AG
<b>Contracted Research</b>	AbbVie Inc, Acerta Pharma — A member of the AstraZeneca Group, Bristol Myers Squibb, Cyclacel Pharmaceuticals Inc, Genentech, a member of the Roche Group, Gilead Sciences Inc, GSK, Janssen Biotech Inc, Juno Therapeutics, a Celgene Company, Kite, A Gilead Company, Loxo Oncology Inc, a wholly owned subsidiary of Eli Lilly & Company, Novartis, Nurix Therapeutics Inc, Oncternal Therapeutics, Pharmacyclics LLC, an AbbVie Company
<b>Nonrelevant Financial Relationships</b>	National Comprehensive Cancer Network (Chair, CLL), Support by the NIH/NCI under award number P30 CA016672 and use of MD Anderson Cancer Center Support Grant (CCSG) shared resources

# Dr Allan — Disclosures

## Survey Participant

<b>Advisory Committees</b>	NeoGenomics
<b>Consulting Agreements</b>	AbbVie Inc, Adaptive Biotechnologies Corporation, ADC Therapeutics, AstraZeneca Pharmaceuticals LP, BeiGene Ltd, Genentech, a member of the Roche Group, Janssen Biotech Inc, Lilly, Pharmacyclics LLC, an AbbVie Company
<b>Contracted Research</b>	BeiGene Ltd, Bristol Myers Squibb, Genentech, a member of the Roche Group
<b>Data and Safety Monitoring Boards/Committees</b>	Merck
<b>Speakers Bureaus</b>	AbbVie Inc, BeiGene Ltd

# Dr Davids — Disclosures

## Survey Participant

<b>Consulting Agreements</b>	AbbVie Inc, Adaptive Biotechnologies Corporation, Ascentage Pharma, AstraZeneca Pharmaceuticals LP, BeiGene Ltd, Bristol Myers Squibb, Galapagos NV, Genentech, a member of the Roche Group, Genmab US Inc, Janssen Biotech Inc, Lilly, MEI Pharma Inc, Merck, Nuvalent, Schrödinger, Secura Bio, Takeda Pharmaceuticals USA Inc, TG Therapeutics Inc
<b>Contracted Research</b>	Ascentage Pharma, MEI Pharma Inc, Novartis
<b>Nonrelevant Financial Relationships</b>	UpToDate

# Dr Sharman — Disclosures

## Survey Participant

<b>Consulting Agreements and Contracted Research</b>	AbbVie Inc, AstraZeneca Pharmaceuticals LP, BeiGene Ltd, Bristol Myers Squibb, Genentech, a member of the Roche Group, Lilly, Merck
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# Dr Siddiqi — Disclosures

## Survey Participant

<b>Advisory Committees</b>	AbbVie Inc, AstraZeneca Pharmaceuticals LP, BeiGene Ltd, Bristol Myers Squibb, Celgene Corporation, Gilead Sciences Inc
<b>Contracted Research</b>	Bristol Myers Squibb
<b>Data and Safety Monitoring Boards/Committees</b>	BeiGene Ltd
<b>Speakers Bureaus</b>	AstraZeneca Pharmaceuticals LP

## Dr Love — Disclosures

**Dr Love** is president and CEO of Research To Practice. Research To Practice receives funds in the form of educational grants to develop CME activities from the following companies: Aadi Bioscience, AbbVie Inc, ADC Therapeutics, Alexion Pharmaceuticals, Amgen Inc, Array BioPharma Inc, a subsidiary of Pfizer Inc, Arvinas, Astellas, AstraZeneca Pharmaceuticals LP, Aveo Pharmaceuticals, Bayer HealthCare Pharmaceuticals, BeiGene Ltd, Black Diamond Therapeutics Inc, Blueprint Medicines, Boehringer Ingelheim Pharmaceuticals Inc, Bristol Myers Squibb, Clovis Oncology, Coherus BioSciences, CTI BioPharma, a Sobi Company, Daiichi Sankyo Inc, Eisai Inc, Elevation Oncology Inc, Exact Sciences Corporation, Exelixis Inc, Genentech, a member of the Roche Group, Genmab US Inc, Geron Corporation, Gilead Sciences Inc, GSK, Hologic Inc, ImmunoGen Inc, Incyte Corporation, Ipsen Biopharmaceuticals Inc, Jazz Pharmaceuticals Inc, Johnson & Johnson, Karyopharm Therapeutics, Kite, A Gilead Company, Kura Oncology, Legend Biotech, Lilly, MEI Pharma Inc, Merck, Mersana Therapeutics Inc, Mirati Therapeutics Inc, Mural Oncology Inc, Natera Inc, Novartis, Novartis Pharmaceuticals Corporation on behalf of Advanced Accelerator Applications, Novocure Inc, Nuvalent, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Rigel Pharmaceuticals Inc, R-Pharm US, Sanofi, Seagen Inc, Servier Pharmaceuticals LLC, SpringWorks Therapeutics Inc, Stemline Therapeutics Inc, Syndax Pharmaceuticals, Taiho Oncology Inc, Takeda Pharmaceuticals USA Inc, TerSera Therapeutics LLC, and Tesaro, A GSK Company.

## **Commercial Support**

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## **Research To Practice CME Planning Committee Members, Staff and Reviewers**

Planners, scientific staff and independent reviewers for Research To Practice have no relevant conflicts of interest to disclose.



**This educational activity contains discussion of non-FDA-approved uses of agents and regimens. Please refer to official prescribing information for each product for approved indications.**

# Agenda

**Module 1: Selection and Sequencing of Therapy for Relapsed/Refractory (RR) Chronic Lymphocytic Leukemia (CLL)**  
— Dr Wierda

**Module 2: First-Line Therapy for CLL — Dr Coombs**

**Module 3: Novel Agents and Strategies for RR CLL — Dr Wierda**

**Module 4: ASCO and EHA 2025**

# Agenda

**Module 1: Selection and Sequencing of Therapy for Relapsed/Refractory (RR) Chronic Lymphocytic Leukemia (CLL)  
— Dr Wierda**

**Module 2: First-Line Therapy for CLL — Dr Coombs**

**Module 3: Novel Agents and Strategies for RR CLL — Dr Wierda**

**Module 4: ASCO and EHA 2025**

# Beyond Covalent BTK Inhibitors and Venetoclax

Regulatory and reimbursement issues aside, what would be your preferred third-line systemic therapy for a 60-year-old patient with double-refractory CLL?

Regulatory and reimbursement issues aside, what would be your preferred third-line systemic therapy for an 80-year-old patient with double-refractory CLL?

## Beyond Covalent BTK Inhibitors and Venetoclax

Regulatory and reimbursement issues aside, what second-line systemic therapy would you recommend for a 60-year-old patient who has experienced disease progression on a covalent BTK inhibitor and is not a candidate for venetoclax because of comorbidities?

Regulatory and reimbursement issues aside, what second-line systemic therapy would you recommend for an 80-year-old patient who has experienced disease progression on a covalent BTK inhibitor and is not a candidate for venetoclax because of comorbidities?

## Beyond Covalent BTK Inhibitors and Venetoclax

Regulatory and reimbursement issues aside, what systemic therapy would you recommend next for a 60-year-old patient who has experienced disease progression on venetoclax/obinutuzumab and developed unacceptable tolerability issues (bleeding, arthralgias) on a covalent BTK inhibitor?

Regulatory and reimbursement issues aside, what systemic therapy would you recommend next for an 80-year-old patient who has experienced disease progression on venetoclax/obinutuzumab and developed unacceptable tolerability issues (bleeding, arthralgias) on a covalent BTK inhibitor?

## In which line of therapy are you currently using pirtobrutinib for your patients with CLL?



**Dr Coombs**

**Third line**



**Dr Wierda**

**Second line and beyond**



**Dr Allan**

**Third line**



**Dr Davids**

**Third line**



**Dr Sharman**

**Third line**









**Dr Siddiqi**

**Fourth line**









Based on current clinical trial data and your personal experience, how would you compare the global efficacy and tolerability/toxicity of pirtobrutinib to those of ibrutinib, acalabrutinib and zanubrutinib for patients with relapsed/refractory CLL?

		Efficacy	Tolerability/toxicity
	Dr Coombs	There are not enough available data at this time	Pirtobrutinib has the least toxicity
	Dr Wierda	There are not enough available data at this time	Pirtobrutinib has the least toxicity
	Dr Allan	About the same	Pirtobrutinib has the least toxicity
	Dr Davids	There are not enough available data at this time	Pirtobrutinib has the least toxicity
	Dr Sharman	There are not enough available data at this time	Pirtobrutinib has the least toxicity
	Dr Siddiqi	About the same	Pirtobrutinib has the least toxicity







Based on the published literature and/or your clinical experience, please estimate the percent chance that a patient with CLL who is receiving ibrutinib will experience toxicity during treatment that will require withholding or permanently discontinuing administration.

What is the primary toxicity patients experience that leads to withholding this drug/regimen?







	Chance of withholding	Chance of discontinuation	Primary toxicity
 Dr Coombs	50%	40%	Cardiac; myalgias/arthralgias
 Dr Wierda	40%	40%	Various
 Dr Allan	20%	20%	BTKi class effects
 Dr Davids	40%	20%	Atrial fibrillation
 Dr Sharman	50%	40%	Arthralgias
 Dr Siddiqi	20%	20%	Arthralgias

BTKi = BTK inhibitor

Based on the published literature and/or your clinical experience, please estimate the percent chance that a patient with CLL who is receiving acalabrutinib will experience toxicity during treatment that will require withholding or permanently discontinuing administration.  
What is the primary toxicity patients experience that leads to withholding this drug/regimen?

	Chance of withholding	Chance of discontinuation	Primary toxicity
 Dr Coombs	15%	10%	Headache
 Dr Wierda	20%	10%	Various
 Dr Allan	15%	15%	BTKi class effects
 Dr Davids	20%	10%	Headache
 Dr Sharman	20%	10%	Various
 Dr Siddiqi	15%	10%	Fatigue

Based on the published literature and/or your clinical experience, please estimate the percent chance that a patient with CLL who is receiving zanubrutinib will experience toxicity during treatment that will require withholding or permanently discontinuing administration.  
What is the primary toxicity patients experience that leads to withholding this drug/regimen?

	Chance of withholding	Chance of discontinuation	Primary toxicity
 Dr Coombs	15%	10%	I've not recognized a predominant toxicity yet
 Dr Wierda	20%	10%	Various
 Dr Allan	15%	15%	BTKi class effects
 Dr Davids	20%	10%	Hypertension
 Dr Sharman	25%	10%	Various
 Dr Siddiqi	10%	5%	Fatigue

Based on the published literature and/or your clinical experience, please estimate the percent chance that a patient with CLL who is receiving pirtobrutinib will experience toxicity during treatment that will require withholding or permanently discontinuing administration.  
What is the primary toxicity patients experience that leads to withholding this drug/regimen?

		Chance of withholding	Chance of discontinuation	Primary toxicity
	Dr Coombs	5%	5%	Neutropenia; GI
	Dr Wierda	15%	5%	Various
	Dr Allan	10%	10%	BTKi class effects
	Dr Davids	15%	5%	Bleeding
	Dr Sharman	10%	10%	Infection
	Dr Siddiqi	5%	5%	Bleeding

# Select Questions on Chimeric Antigen Receptor (CAR) T-Cell Therapy

Are there any differences in the way you think through eligibility in terms of patient age, comorbidities, et cetera for CAR T-cell therapy versus other available treatments?

For patients who are eligible to receive pirtobrutinib and CAR T-cell therapy, which one do you generally recommend first?

## Select Questions on CAR T-Cell Therapy

In general, do you use bridging therapy for your patients who are being referred for CAR T-cell therapy? If so, what's your usual treatment approach?

Do you believe patients with RR CLL have been “cured” with CAR T-cell therapy?



# Select Questions on CAR T-Cell Therapy

Based on the published literature and/or your clinical experience, what is the chance that a patient with CLL receiving CAR T-cell therapy will experience CRS? What about ICANS?

What is your approach to monitoring and managing these toxicities?

## At what point in the treatment course are you referring patients with multiregimen-relapsed CLL for consultation regarding CAR T-cell therapy?



**Dr Coombs**

**Case by case basis; third line for young, fit patients**



**Dr Wierda**

**Depends more on the patient's clinical situation**



**Dr Allan**

**After third relapse**



**Dr Davids**

**At second relapse**



**Dr Sharman**

**When pirtobrutinib treatment is initiated**



**Dr Siddiqi**

**At second relapse**

## To approximately how many patients with CLL have you administered lisocabtagene maraleucel (liso-cel) within or outside of a protocol setting?



**Dr Coombs**

0



**Dr Wierda**

25



**Dr Allan**

0



**Dr Davids**

0



**Dr Sharman**

4



**Dr Siddiqi**

~30

# Selection and Sequencing of Therapy for Relapsed/Refractory CLL

**June 1, 2025**

**WILLIAM G. WIERDA MD, PHD**

*PROFESSOR OF MEDICINE*

*SECTION HEAD, CLL*

*DEPARTMENT OF LEUKEMIA*

*U.T. M.D. ANDERSON CANCER CENTER*

*HOUSTON, TX USA*

# Targeted Therapy Sequencing for CLL

cBTKi

BCL2i  
+CD20

cBTKi + BCL2i not included here

## Factors affecting timelines:

- Age
- Del(17p) / *TP53*-m
- IGHV-MS / Del(11q)
- Complex karyotype

1

2

3

4

5

6

7

8

9

10

11

12

13

14

Years

## Double Exposed vs. Double Refractory:

- Exposed  $\neq$  Refractory
- Refractory=progression on treatment

# Selected First-line Phase III Trials in CLL

Trial	N	Treatment Arms		
		Control	Investigational	
EA9161	720	IBR + OBIN	IBR + OBIN + VEN	
A041702	454	IBR + OBIN	IBR + OBIN + VEN	
CLL17	909	IBR	VEN + OBIN	VEN + IBR
MAJIC	750	VEN + OBIN	ACA + VEN	
CLL16 (del(17p) / TP53-m / CK)	178	VEN + OBIN	ACA + VEN + OBIN	
CELESTIAL-TNCLL	640	VEN + OBIN	SONRO + ZANU	
BRUIN CLL-313	250	BR	PIRTO	
BRUIN CLL-314	650 <sup>#</sup>	IBR	PIRTO	
CLL18	813	VEN + OBIN	VEN + PIRTO (Fixed)	VEN + PIRTO (uMRD)
BELLWAVE-011	1200	IBR or ACA	NEMTA	
BELLWAVE-008	300	FCR/BR	NEMTA	

<sup>#</sup> enrolls both frontline and R/R BTK-naïve CLL

# Differentiated Kinase Inhibition Profile

<b>Irreversible (covalent)</b>		TEC Family Kinases					Inhibition of Other Kinases
	IC <sub>50</sub> (nM)	BTK	ITK	Tec <sup>#</sup>	TXK <sup>*</sup>	BMX <sup>*</sup>	Notable Target Kinases
	Ibrutinib <sup>2</sup>	0.5	10.7	78	2.0 <sup>3</sup>	0.8	>10 more: EGFR family
	Acalabrutinib <sup>3</sup>	5.1	>1000	93	368	46	Selective
	Zanubrutinib <sup>4</sup>	0.22	30	1.9	n/a	n/a	N/A (not published)
<b>Reversible (non-covalent)</b>	Vecabrutinib <sup>1</sup>	3	14	14	474	224	Selective -4 non-Tec family kinases: SRC family, NEK11
	Nemtabrutinib <sup>5</sup>	4.23	>10000	5.8	36.4	5.23	>20 more: SRC & TRK families, RAF1, MEK1
	Pirtobrutinib <sup>6</sup>	3.15	>5000	1234	209	1155	Very Selective
	Luxepatinib <sup>7</sup>	8.4	4.3	>1000	n/a	14.5	18 w/ IC <sub>50</sub> <10 nM: FLT3 (wt, ITD) c-MET, TRK family & Aurora kinases

n/a=not available

\* Determined with vecabrutinib free base (also relevant for SRC and EGFR)

<sup>#</sup> Activated (also relevant for LCK)

<sup>1</sup> Neuman et al., ASH 2016

<sup>2</sup> Honigberg et al., PNAS 2010

<sup>3</sup> Byrd et al., NEJM 2016

<sup>4</sup> Tam et al., ASH 2016

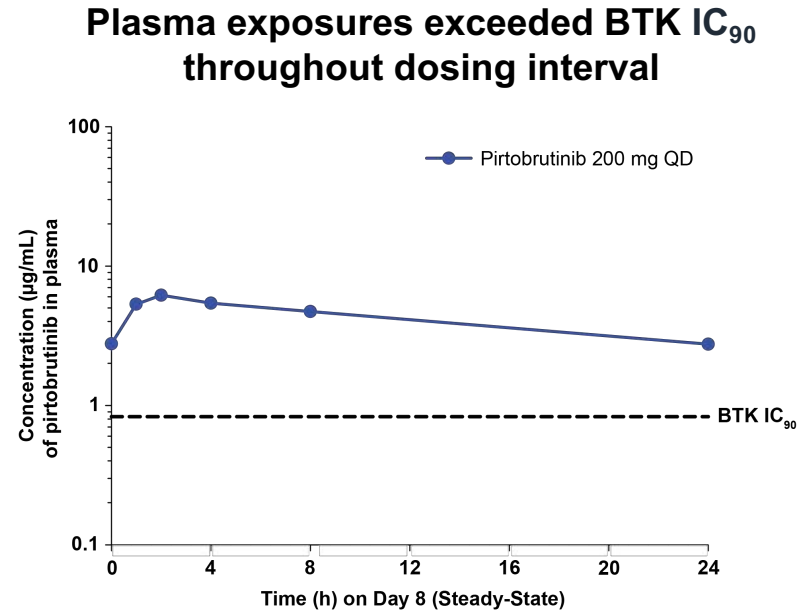
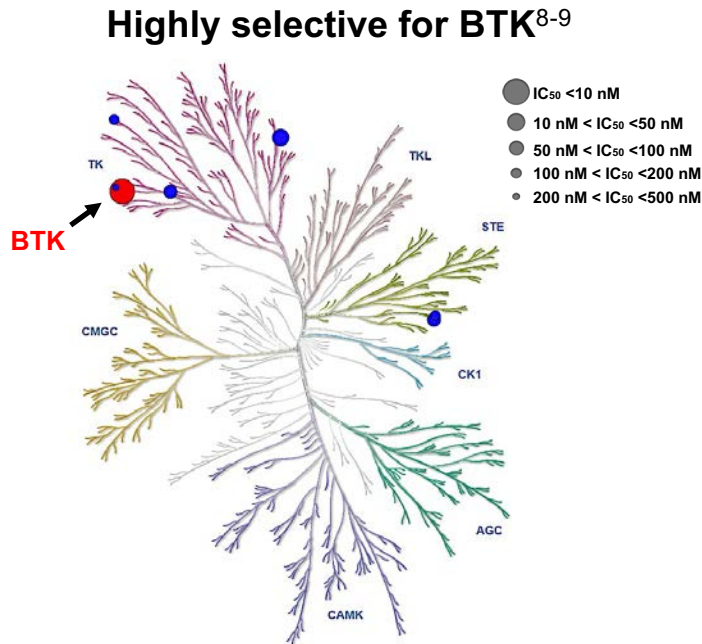
<sup>5</sup> Eathiraj et al., Pan Pacific Lymphoma Conference 2016

<sup>6</sup> Brandhuber et al., SOHO 2018

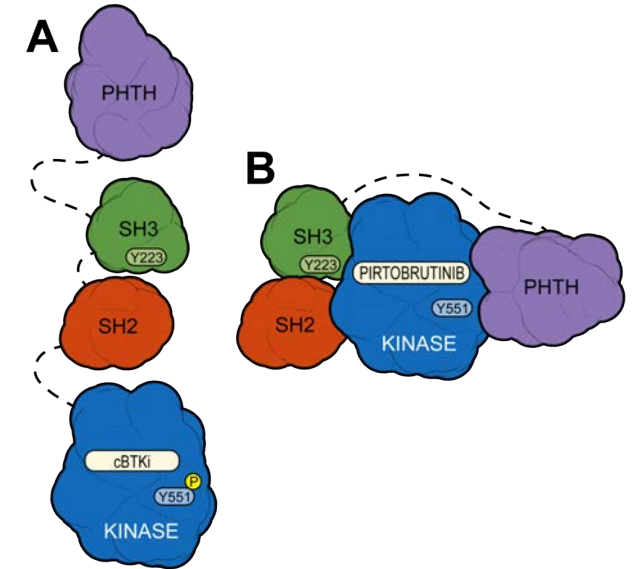
<sup>7</sup> Zhang et al, EHA 2018



# Pirtobrutinib is a Highly Selective, Non-Covalent (Reversible) BTK Inhibitor



Pirtobrutinib may stabilize/maintain BTK in a closed inactive conformation<sup>11</sup>

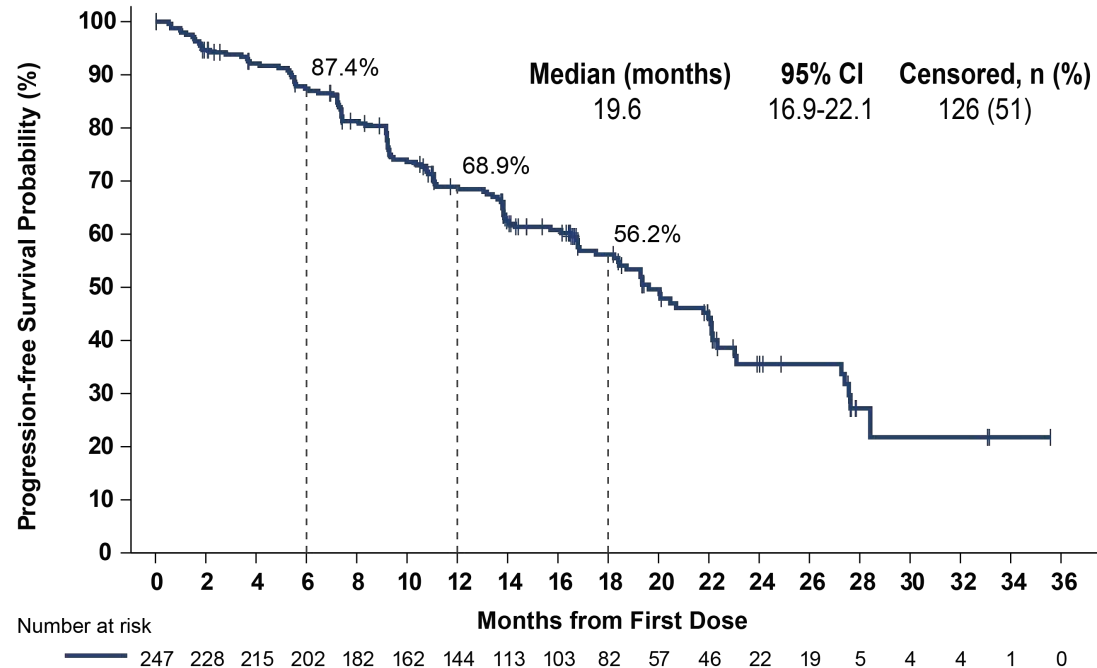


- Pirtobrutinib is approved in the USA to treat relapsed or refractory MCL after at least two lines of systemic therapy, including prior BTK inhibitor<sup>10</sup>
- Inhibits both WT and C481-mutant BTK with equal low nM potency in *in vitro* models<sup>11</sup> and CLL cells<sup>12</sup>
- Steady state plasma exposure corresponding to 96% BTK target inhibition and a pirtobrutinib-BTK binding complex half-life of about 2 hrs
- In contrast to cBTKi (A), pirtobrutinib (B) appears to stabilize BTK in a closed, inactive conformation, blocking access to upstream kinases and phosphorylation of Y551, thus inhibiting scaffolding interactions that support kinase-independent BTK signaling<sup>11</sup>

<sup>8</sup>Mato et al. *Lancet* 2021. <sup>9</sup>Brandhuber et al. *Clin Lymphoma Myeloma Leuk* 2018. <sup>10</sup> Pirtobrutinib [Prescribing Information]. Indianapolis, IN: Eli Lilly and Company, 2023. <sup>11</sup>Gomez et al. *Blood*.2023. <sup>12</sup> Aslan B et al. *Blood Cancer J* 2022.

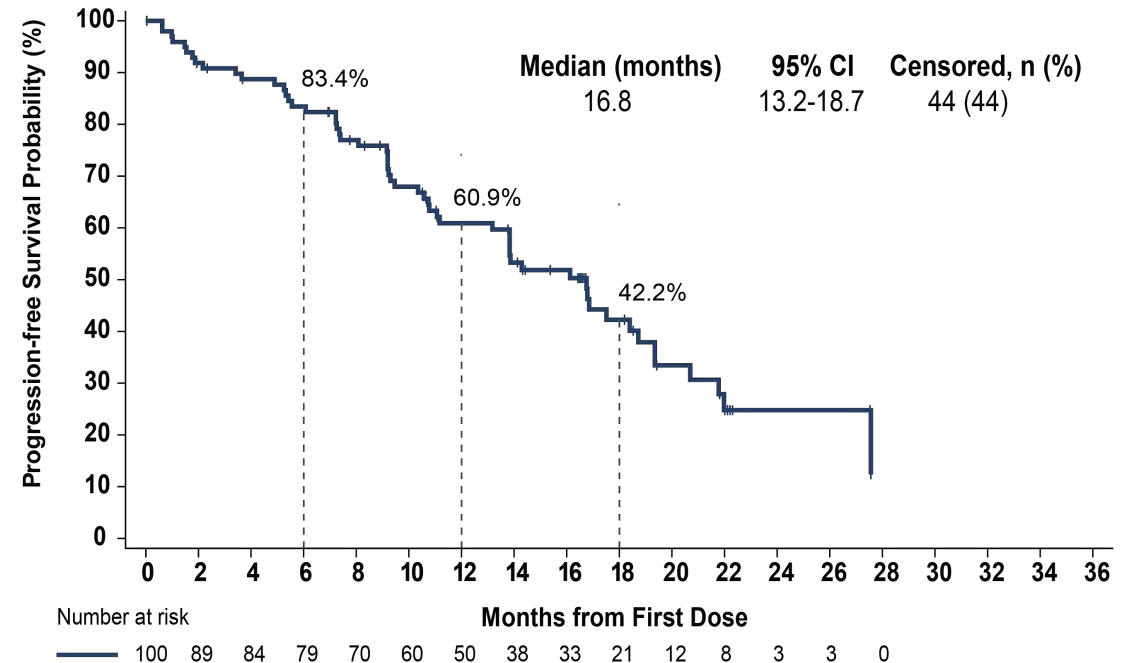
# Pirtobrutinib: Progression-Free Survival in CLL/SLL Patients who Received Prior BTKi Treatment

## All prior BTKi patients Median prior lines = 3



- Median follow-up of 19.4 months for patients who received prior BTKi

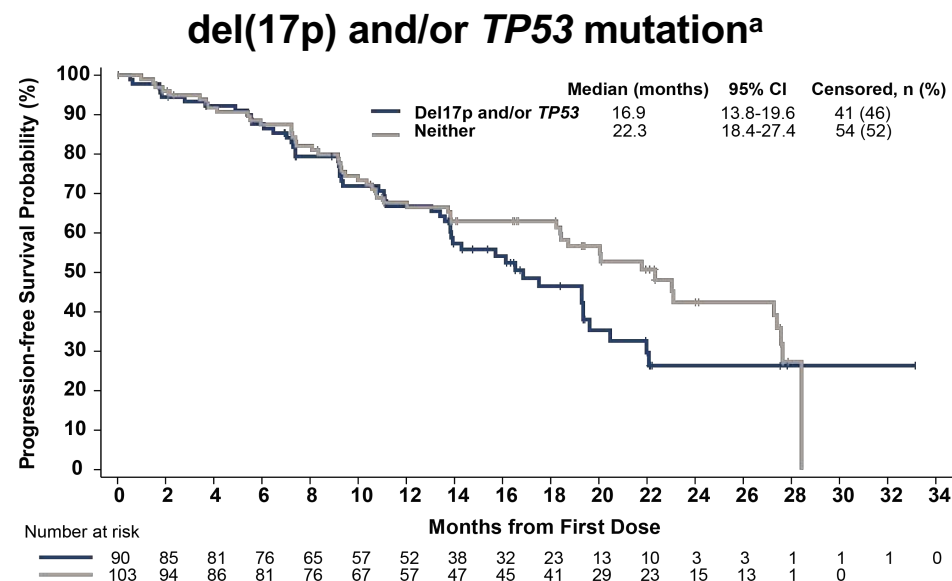
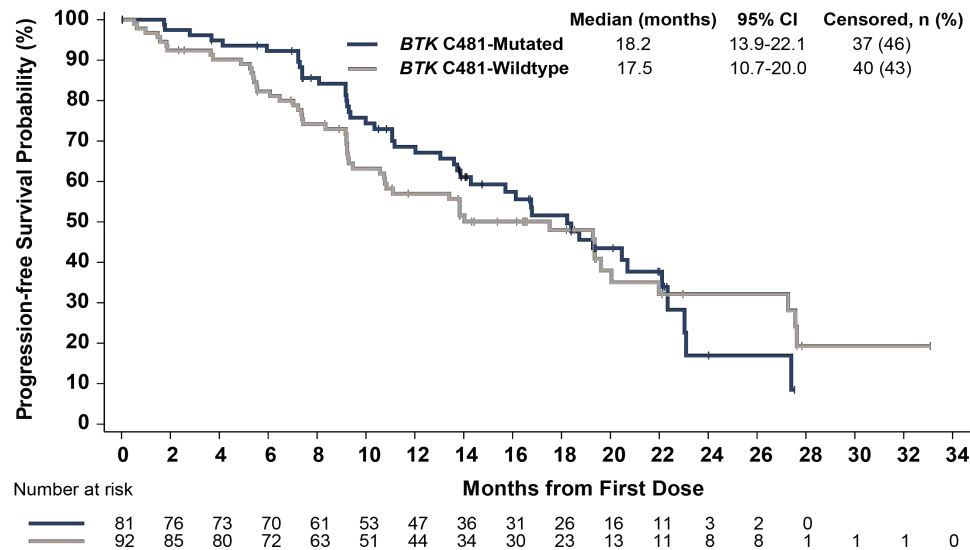
## Prior BTKi and BCL2i patients Median prior lines = 5



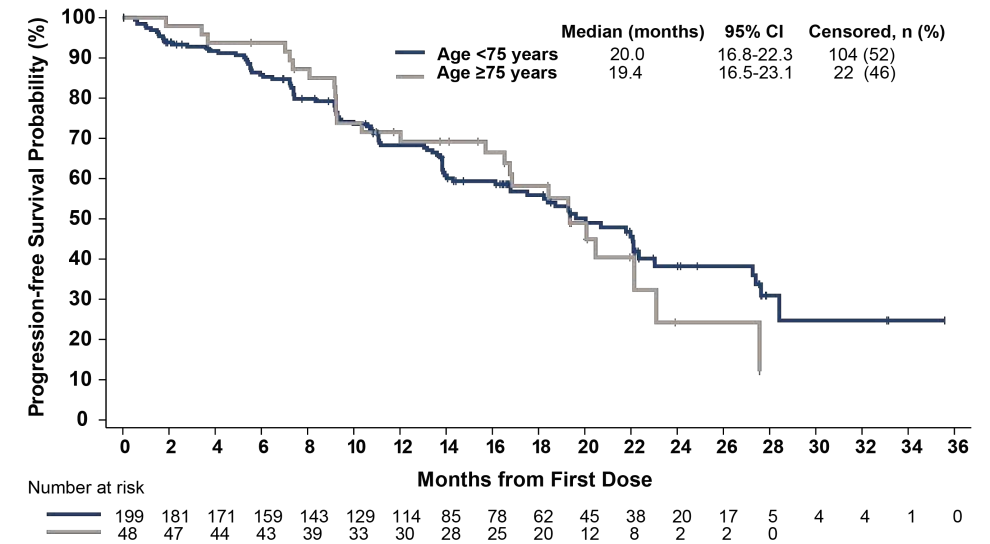
- Median follow-up of 18.2 months for patients who received prior BTKi and BCL2i

# Pirtobrutinib: Progression-Free Survival in CLL/SLL Subgroups

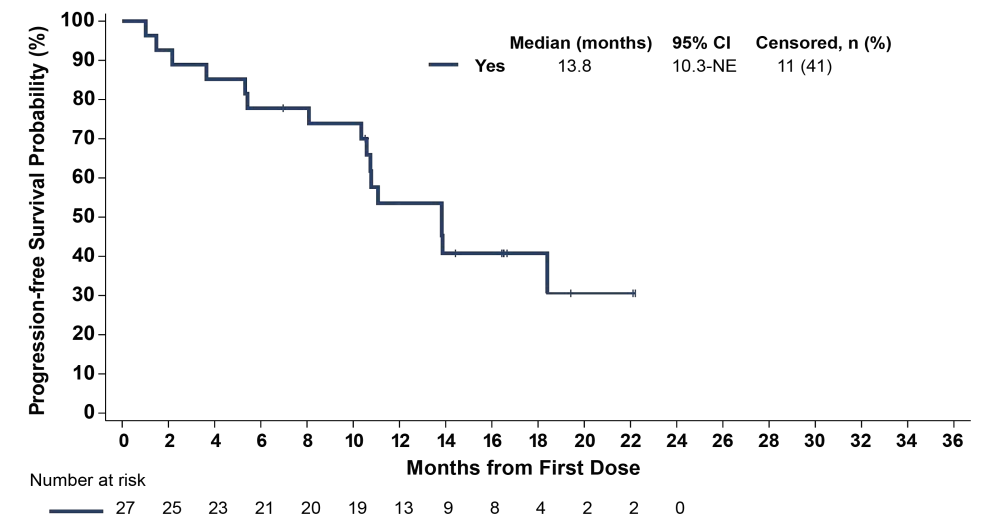
## *BTK* C481 mutation status<sup>a,b</sup>



## Age

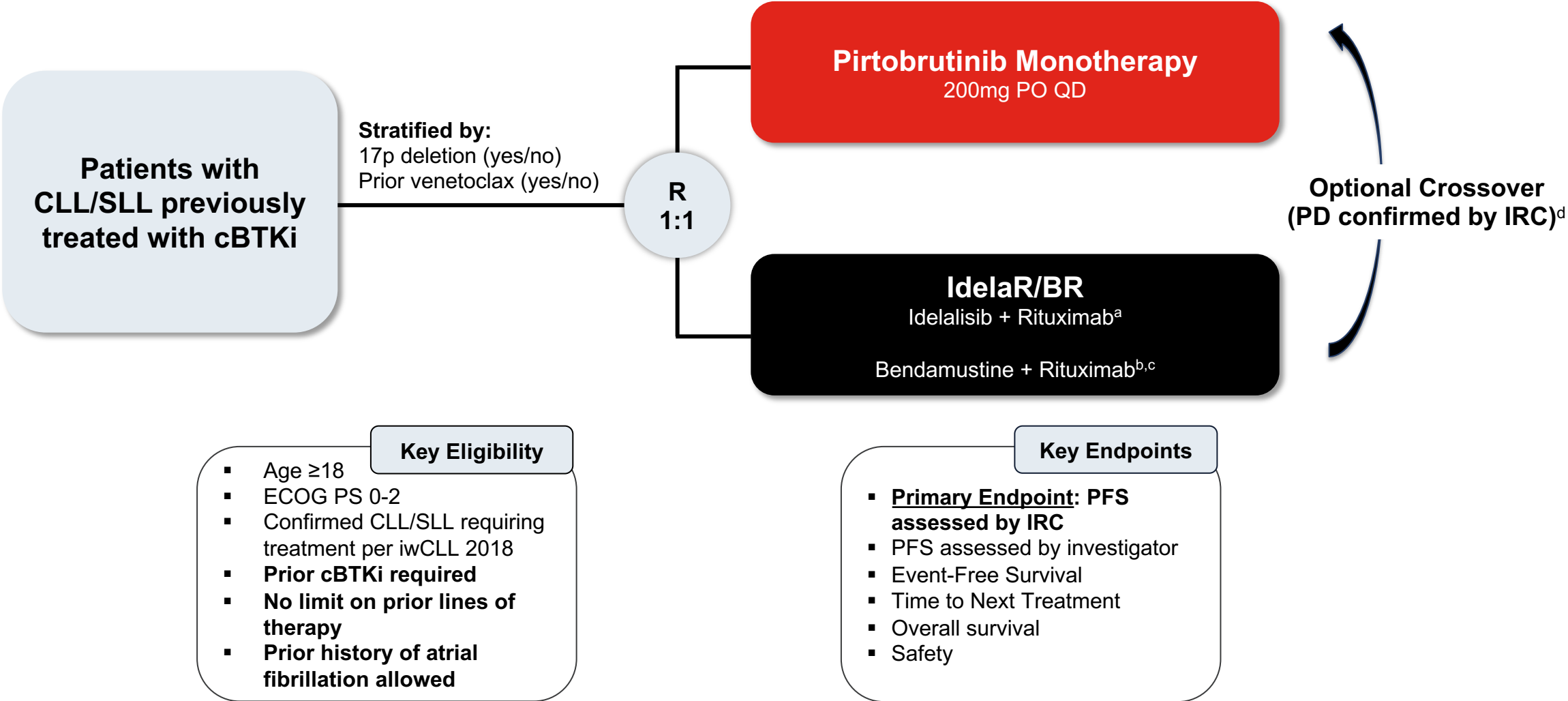


## Prior BTKi, CIT, BCL2i, and PI3Ki therapy



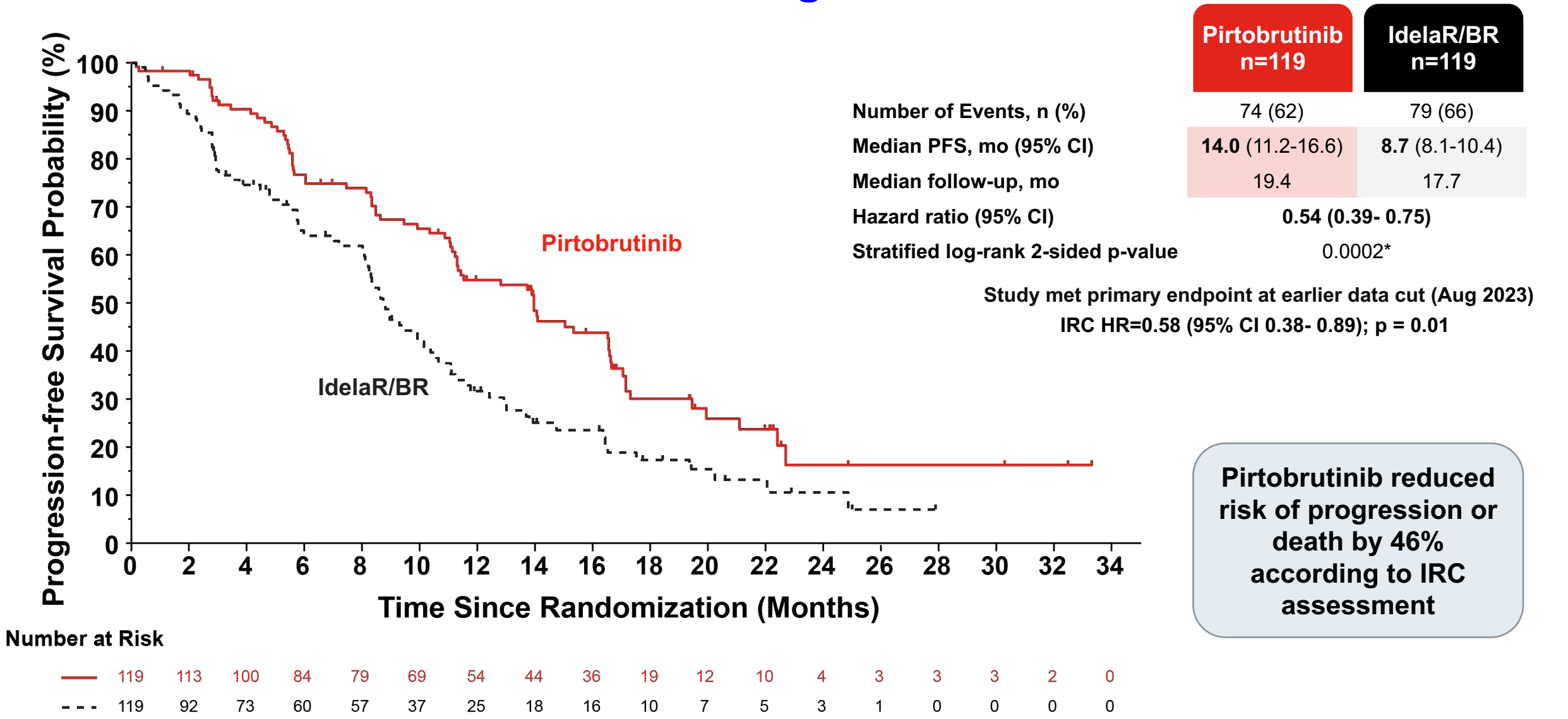
Data cutoff date of 29 July 2022. Response status per iwCLL 2018 according to independent review committee assessment. <sup>a</sup>*BTK* C481 mutation status, del(17p), and *TP53* mutation status were centrally determined and based on pre-treatment samples. <sup>b</sup>Patients with available mutation data who progressed on any prior BTKi.

# BRUIN CLL-321: Study Design



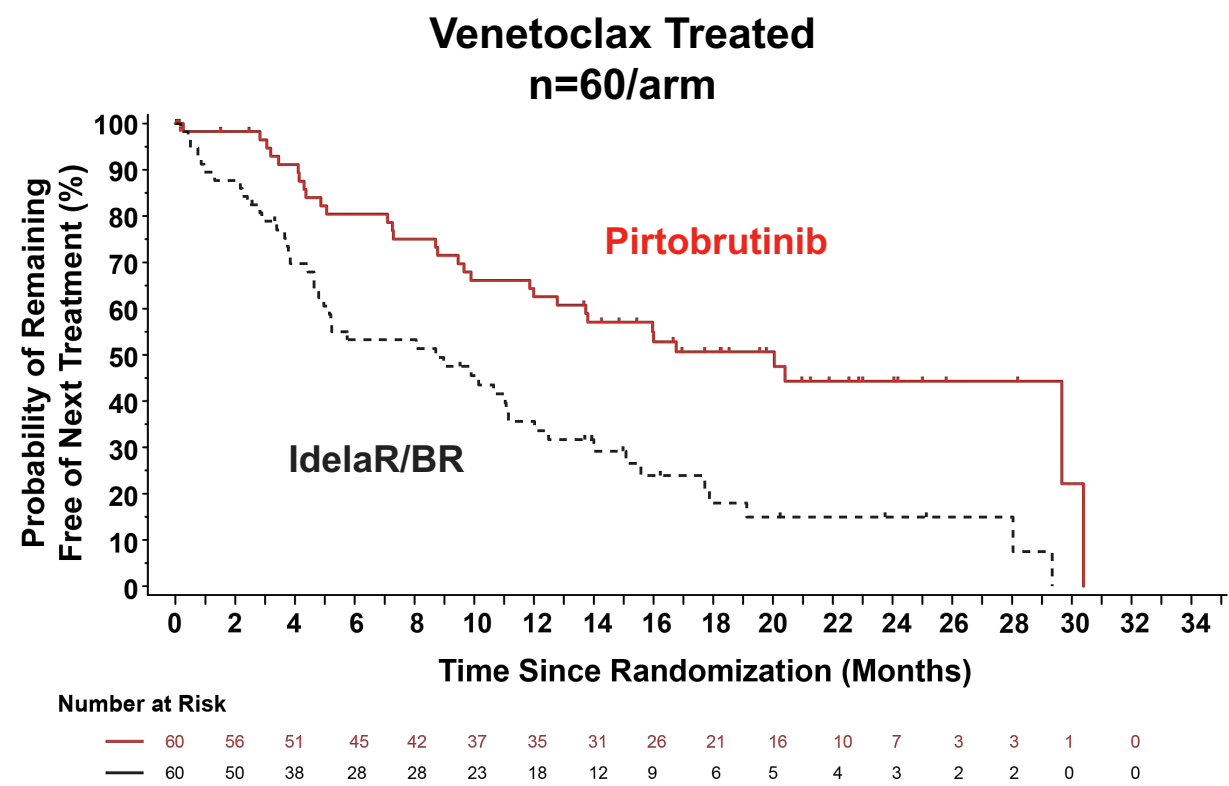
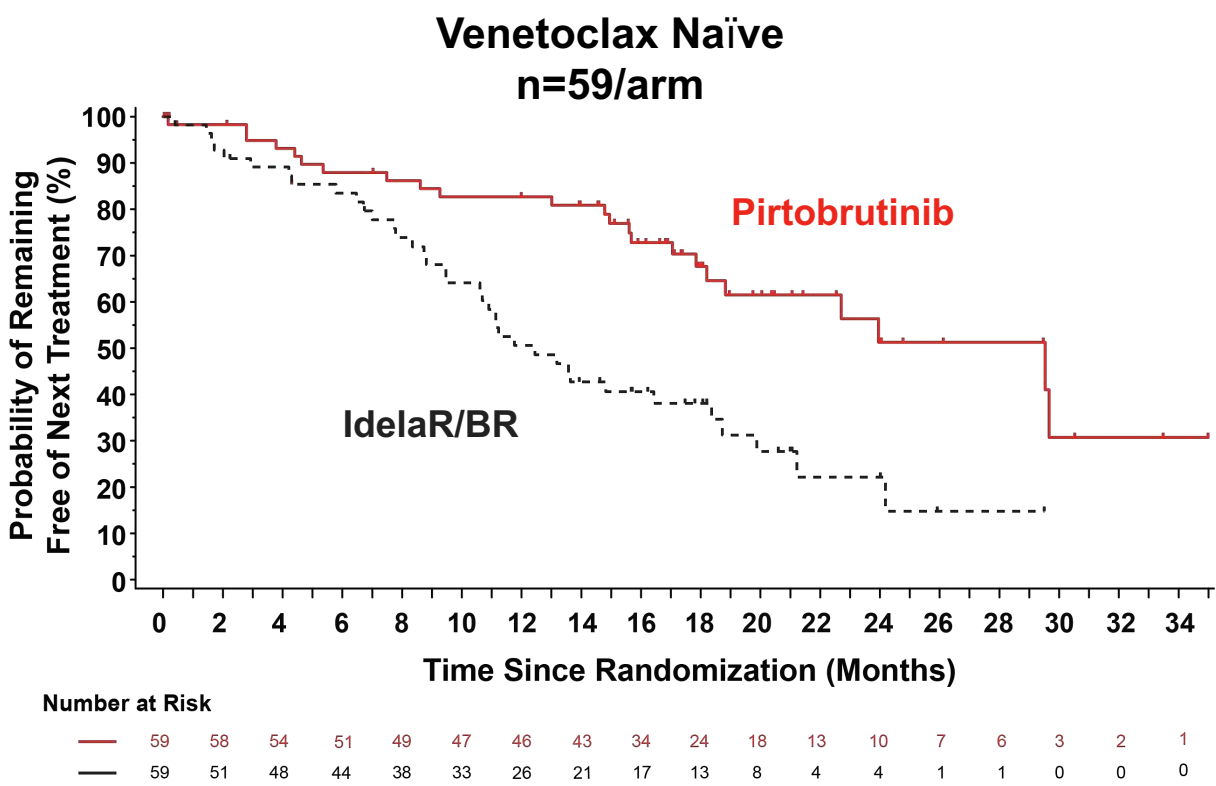
Treatment was given in 28-day cycles. PFS assessed based on iwCLL2018. <sup>a</sup>Idelalisib dosed at 150mg PO BID. Day 1 of cycle 1, first dose of rituximab at 375 mg/m<sup>2</sup>, next 4 infusions at 500 mg/m<sup>2</sup> every 2 weeks, next 3 infusions at 500 mg/m<sup>2</sup> every 4 weeks. <sup>b</sup>Bendamustine (70 mg/m<sup>2</sup>) administered IV D1, D2 of cycles 1-6. <sup>c</sup>Day 1 of cycle 1, first dose of rituximab at 375 mg/m<sup>2</sup>, next 5 infusions day 1 of cycle 2 through cycle 6 at 500 mg/m<sup>2</sup>. <sup>d</sup>Eligible patients receiving investigator's choice of IdelaR/BR could crossover to receive pirtobrutinib monotherapy upon confirmation of PD by IRC per protocol. Abbreviations: BID, twice daily; BR, bendamustine + rituximab; cBTKi, covalent Bruton tyrosine kinase inhibitor; CLL, chronic lymphocytic leukemia; ECOG PS, Eastern Cooperative Oncology Group Performance Status; IdelaR, idelalisib + rituximab; IRC, Independent Review Committee; iwCLL, international workshop on chronic lymphocytic leukemia; mg, milligram; PD, progressive disease; PFS, progression-free survival; PO, by mouth; QD, once daily; R, randomized; SLL, small lymphocytic lymphoma.

# BRUIN CLL-321: IRC-Assessed Progression-free Survival



\*nominal p-value. Abbreviations: BR, bendamustine + rituximab; CI, confidence interval; HR, hazard ratio (pirtobrutinib vs. IdelaR/BR); IdelaR, idelalisib + rituximab; IRC, Independent Review Committee; mo, months; PFS, progression-free survival.

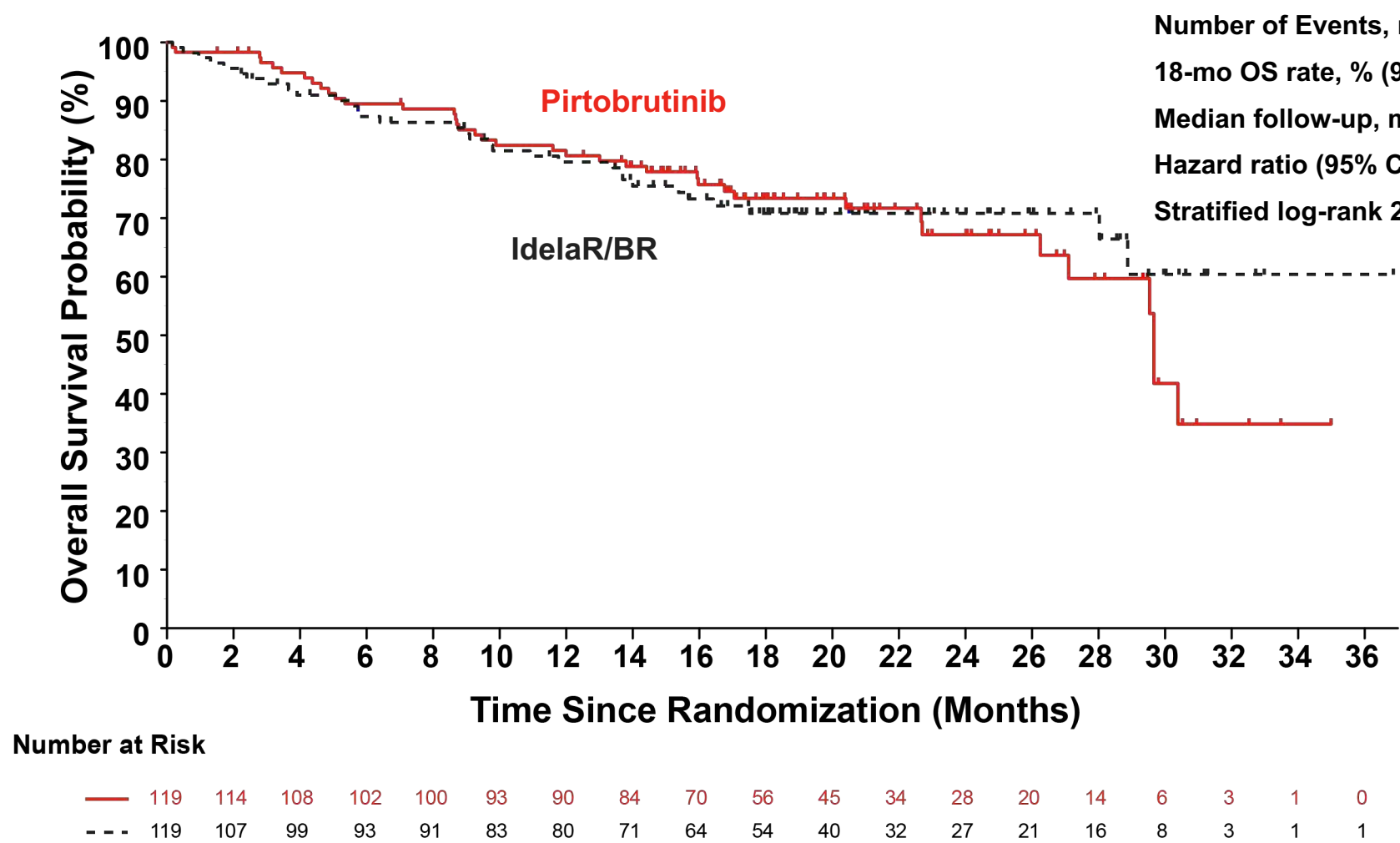
# BRUIN CLL-321: Time to Next Treatment or Death in Venetoclax Naïve and Treated Patients



	Pirtobrutinib n=119	IdelaR/BR n=119
Median TTNT, mo (95% CI)	29.5	12.5
Hazard ratio (95% CI)	0.36 (0.21- 0.61)	
Stratified log-rank 2-sided p-value	0.0001*	

	Pirtobrutinib n=119	IdelaR/BR n=119
Median TTNT, mo (95% CI)	20.0	8.7
Hazard ratio (95% CI)	0.37 (0.23- 0.60)	
Stratified log-rank 2-sided p-value	<0.0001*	

# BRUIN CLL-321: Overall Survival



Pirtobrutinib n=119	IdelaR/BR n=119
38 (32)	32 (27)
73.4 (63.9-80.7)	70.8 (60.9-78.7)
20.4	19.2
1.09 (0.68-1.75)	
0.7202	

Crossover Rate\*: 76% (50/66)

- IPCW crossover adjusted OS analysis: HR 0.89 (95%CI, 0.52-1.53)
- Two-stage AFT crossover adjusted OS analysis: HR 0.77 (95%CI, 0.45-1.26)

Overall survival follow-up limited and confounded by high rate of post-progression crossover

\*Defined as patients with investigator-defined PD events other than death. Abbreviations: BR, bendamustine + rituximab; CI, confidence interval; IdelaR, idelalisib + rituximab; IPCW, inverse-probability-of-censoring weighting; AFT, adjusted for treatment; mo, months; NE, not estimable; NR, not reached; OS, overall survival.

Sharman, et al., ASH 2024, Abstract #886

# BRUIN CLL-321: Adverse Events of Interest for Pirtobrutinib

Adverse Events of Interest	Pirtobrutinib (n=116)	
	Any grade n (%)	Grade 3+ n (%)
Bleeding	25 (21.6)	4 (3.4)
Bruising	9 (7.8)	1 (0.9)
Petechiae and purpura	6 (5.2)	1 (0.9)
Hemorrhage	18 (15.5)	3 (2.6)
Anemia	24 (20.7)	13 (11.2)
Neutropenia	31 (26.7)	24 (20.7)
Thrombocytopenia	11 (9.5)	9 (7.8)
Infection	74 (63.8)	34 (29.3)
Infection without Covid-19	67 (57.8)	30 (25.9)
Atrial fibrillation and atrial flutter	3 (2.6) <sup>a</sup>	2 (1.7)
Hypertension	8 (6.9)	3 (2.6)

<sup>a</sup>2 of 3 patients with atrial fibrillation had a past medical history of atrial fibrillation

**Overall pirtobrutinib AESI rates were comparable to those seen in the Phase 1/2 BRUIN Study<sup>5</sup>**



# BRUIN CLL-322: A phase 3 open-label, randomized study of fixed duration pirtobrutinib plus venetoclax and rituximab versus venetoclax and rituximab in previously treated chronic lymphocytic leukemia/small lymphocytic lymphoma

## Key Inclusion Criteria

- Confirmed CLL/SLL per iwCLL 2018<sup>3</sup>
- Previously treated CLL/SLL (including a covalent BTKi or covalent BTKi naïve [limited to 20% of total enrollment])
- Known 17p status
  - If 17p status is unknown, local or central FISH test results during screening can be used
- No prior venetoclax
- ≥18 years of age and ECOG 0-2

N=600

1:1

Randomization

**Arm A (PVR)**  
Pirtobrutinib  
+ Venetoclax  
+ Rituximab

Pirtobrutinib, 200 mg oral, once daily from C1D1 - C28

Rituximab, IV, 375 mg/m<sup>2</sup> on C1D1  
500 mg/m<sup>2</sup> on D1 of C2-C6

Venetoclax, oral, daily from C5 - C28: 400 mg  
• Dose Ramp (5 weeks) from C4D1: 20-400 mg

**Arm B (VR)**  
Venetoclax  
+ Rituximab

Rituximab, IV, 375 mg/m<sup>2</sup> on C2D1  
500 mg/m<sup>2</sup> on D1 of C3-C7

Venetoclax, oral, daily from C2 - C25: 400 mg  
• Dose Ramp (5 weeks) from C1D1: 20-400 mg

Each cycle is 28 days; C1 of Arm B is 35 days

## Stratification factors

- 17p status (deleted/wildtype)
- Prior experience of BTKi (discontinuation due to PD or other vs no prior BTKi)

**Primary endpoint:** PFS

**Secondary endpoints:** ORR, OS, TTNT, EFS, Safety, PROs

# BRUIN CLL-314: A phase 3, open-label, randomized study of pirtobrutinib versus ibrutinib in patients with CLL/SLL

## BRUIN CLL-314 is a Randomized, Open-Label, Global, Phase 3 Study (NCT05254743)

### Key Inclusion Criteria

- Confirmed diagnosis of CLL/SLL with requirements for therapy (as defined by iwCLL 2018<sup>2</sup> criteria)
- Treatment naïve (up to 30%) or pretreated with non-BTKi therapy
- ≥18 years of age and ECOG 0–2

### Stratification factors

- 17p deletion (present vs not present)
- Number of prior lines of therapy (0 vs 1 vs ≥2)

N~650

1:1  
Randomization

### Arm A

Pirtobrutinib 200 mg orally once daily

### Arm B

Ibrutinib 420 mg orally once daily

28-day continuous cycles, until progressive disease or unacceptable toxicity

### Primary Endpoints

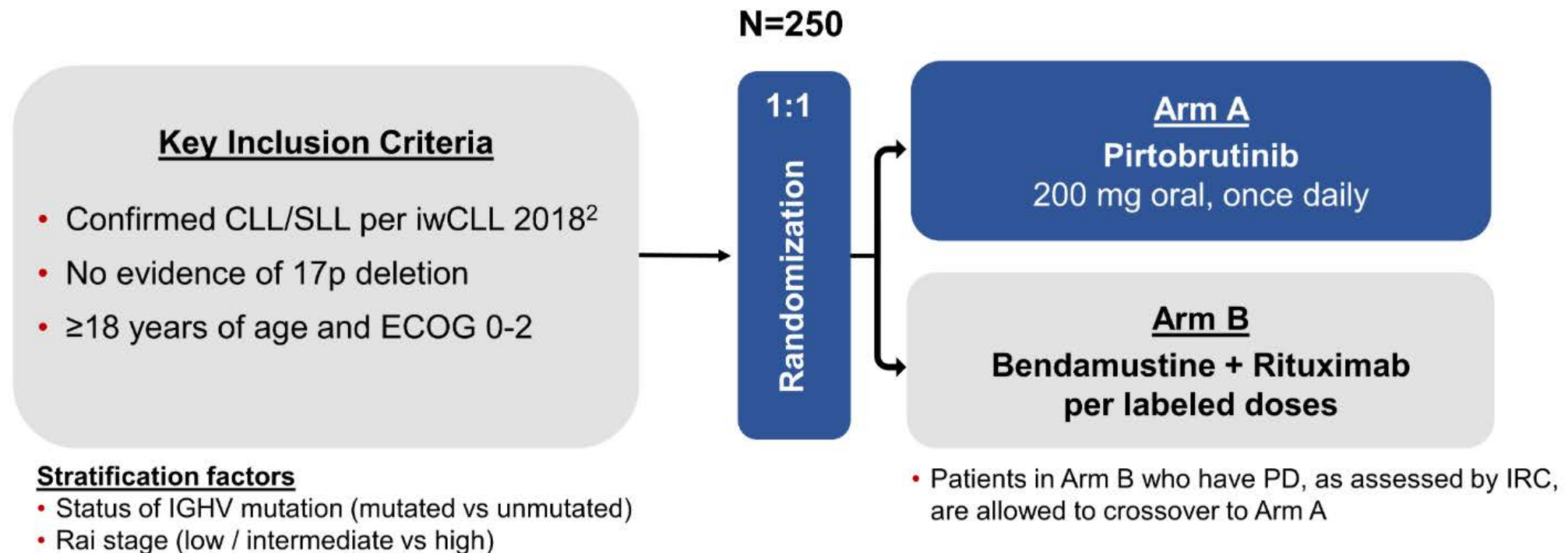
– To establish non-inferiority of pirtobrutinib versus ibrutinib by comparing the overall response rate per iwCLL 2018<sup>2</sup> criteria as assessed by IRC

### Key Secondary Endpoints

– To determine the superiority of pirtobrutinib versus ibrutinib with respect to IRC-assessed event-free survival and progression-free survival

# BRUIN CLL-313: A phase 3 open-label, randomized study of pirtobrutinib versus bendamustine plus rituximab in untreated patients with CLL/SLL

**BRUIN CLL-313 is a randomized, open-label, global phase 3 study (NCT05023980)**



# Cardiovascular Toxicity with BTKi

BTKi	Mechanism	Approved Indications (United States)	Key Trials	Cardiac Adverse Events		
First Generation						
Ibrutinib	Irreversible, covalent binding to Cysteine-481	CLL/SLL Waldenstrom’s Macroglobulinemia Chronic Graft versus Host Disease (GVHD)	RESONATE RESONATE-2 ILLUMINATE	Arrhythmia	AF:	13-16 %
					VA:	1.9 %
				Hypertension:		9-23 %
				Major Bleeding:		3.9-10 %
Second Generation						
Acalabrutinib	Irreversible, covalent binding to Cysteine-481	CLL/SLL Mantle Cell Lymphoma*	ELEVATE T-N ELEVATE R-R	Arrhythmia	AF:	9.4%
					VA:	0.4 %
				Hypertension:		9.4 %
				Major Bleeding:		4.5 %
Zanubrutinib	Irreversible, covalent binding to Cysteine-481	CLL/SLL Mantle cell lymphoma* Relapsed/refractory Marginal zone lymphoma** Waldenstrom’s Macroglobulinemia	SEQUOIA ASPEN ALPINE	Arrhythmia	AF:	2-5 %
					VA:	0.2-0.8 %
				Hypertension:		10-23.5 %
				Major Bleeding:		2.9-5.9 %
Third Generation						
Pirtobrutinib	Reversible, non-covalent binding to ATP pocket	Relapsed or Refractory CLL/SLL Mantle Cell Lymphoma***	BRUIN	Arrhythmia	AF:	3.9 %
					VA:	NR
				Hypertension:		2.3 %
Major Bleeding		2.4 %				



# TRANSCEND CLL 004: Demographics & Baseline

	DL2 + ibrutinib set (n = 51)	Total liso-cel + ibrutinib combination set (n = 56)
Median (range) age, y	65 (44–77)	65 (44–77)
Median (range) prior lines of systemic therapy ≤ 3 prior therapies, n (%)	5 (1–13) 19 (37)	5 (1–13) 20 (36)
Prior BTKi, n (%)	51 (100)	56 (100)
Prior venetoclax, n (%)	39 (76)	42 (75)
Prior BTKi and venetoclax, n (%) BTKi progression/venetoclax failure, <sup>a</sup> n (%)	39 (76) 28 (55)	42 (75) 31 (55)
High-risk cytogenetics, n (%)	50 (98)	55 (98)
Del(17p)	23 (45)	25 (45)
Mutated <i>TP53</i>	23 (45)	24 (43)
Unmutated IGHV	37 (73)	39 (70)
Complex karyotype <sup>b</sup>	25 (49)	29 (52)
Bulky disease (≥ 5 cm) per INV before LDC, <sup>c</sup> n (%)		
Yes	18 (35)	18 (32)
Unknown	4 (8)	5 (9)
Median (range) SPD per INV before LDC, <sup>d</sup> cm <sup>2</sup>	29 (1–218)	27 (1–218)
LDH ≥ ULN before LDC, n (%)	22 (43)	24 (43)
Received bridging therapy (in addition to ibrutinib), <sup>e</sup> n (%)	13 (25)	16 (29)

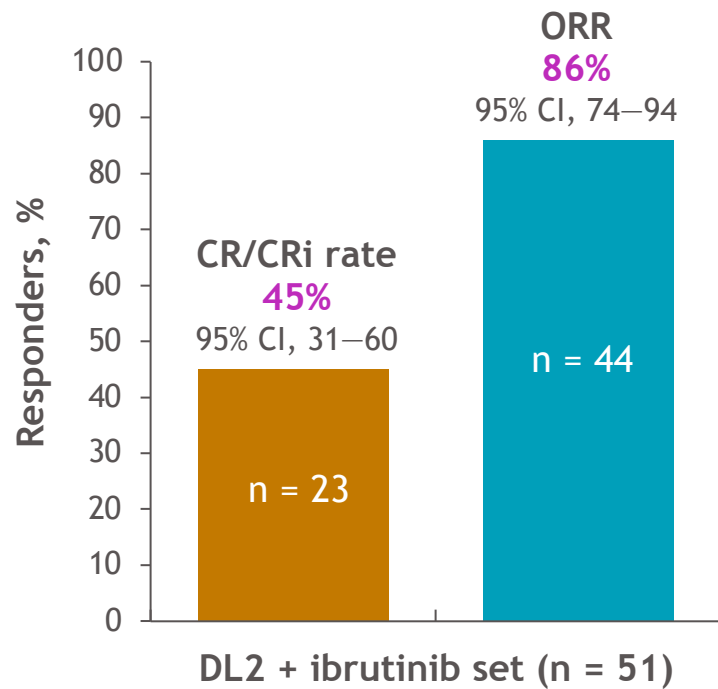
- Median (range) ibrutinib exposure was 34 days (15–188) before and 95 days (6–1517) after liso-cel in the total combination-treated set
- Liso-cel was manufactured for 63/65 (97%) patients in the leukapheresed set
  - Median (range) time from leukapheresis to liso-cel availability was 25 (17–79) days (n = 62)

<sup>a</sup>Includes patients who progressed on a BTKi and met 1 of the following criteria: 1) discontinued venetoclax due to disease progression or intolerability and the patient's disease met indications for further treatment per iwCLL 2018 criteria or 2) failed to achieve an objective response within 3 months of initiating therapy; <sup>b</sup>At least 3 chromosomal aberrations; <sup>c</sup>At least 1 lesion with a longest diameter ≥ 5 cm; <sup>d</sup>Forty-seven patients at DL2 and 51 patients in the total combination-treated set had SPD measurements; <sup>e</sup>Included other anticancer therapies in addition to concurrent ibrutinib treatment given for disease control during liso-cel manufacturing. IGHV, immunoglobulin heavy-chain variable region; LDC, lymphodepleting chemotherapy; SPD, sum of the product of perpendicular diameters.

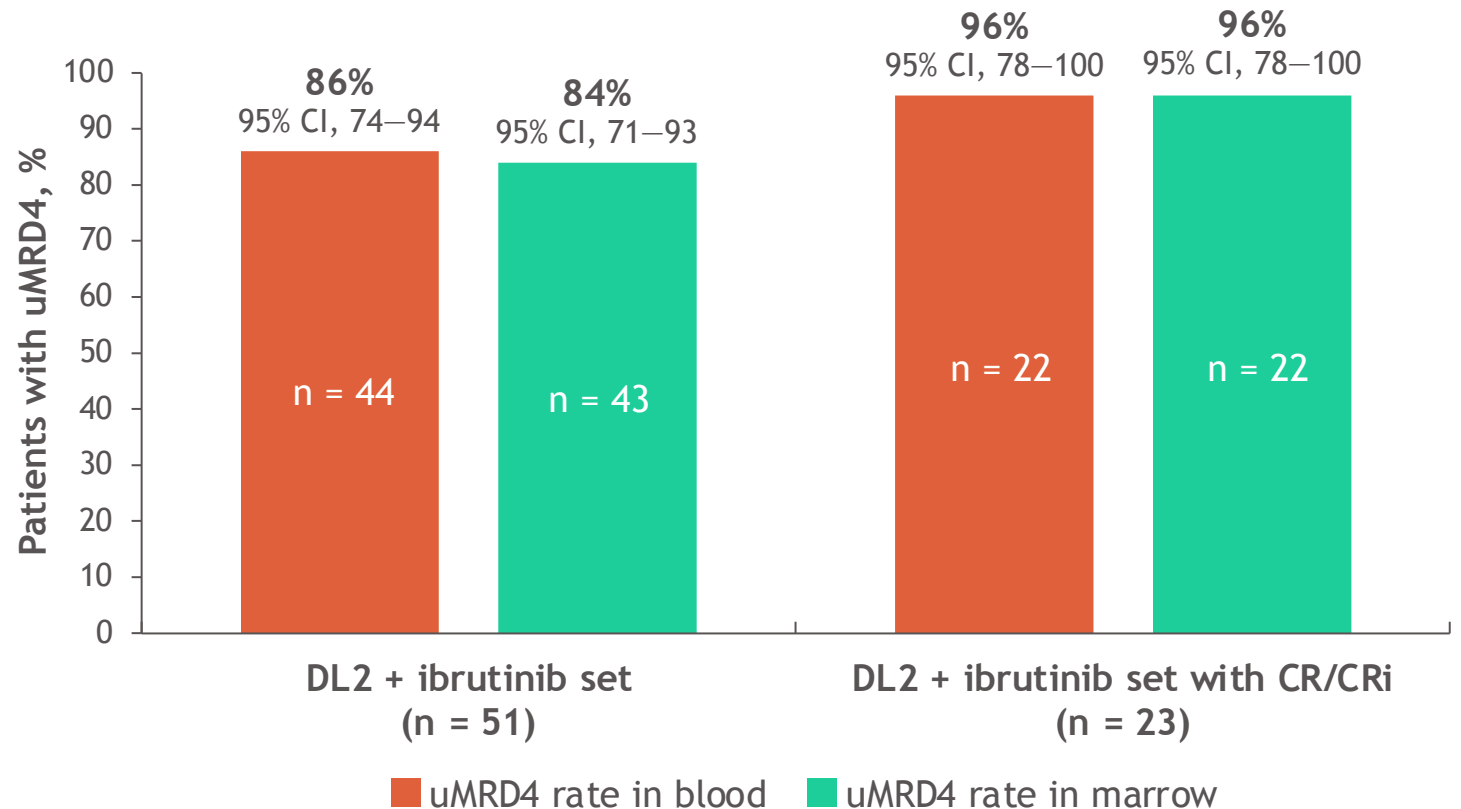
# Efficacy outcomes: response by investigator and uMRD4

- Median (IQR) on-study follow-up (including LTFU): 24.8 months (14.2–34.6)
- Median (range) time to first response: 1 month (0.9–6.0)
- Median (range) time to first CR/CRi: 3 months (0.9–12.1)

Response by INV



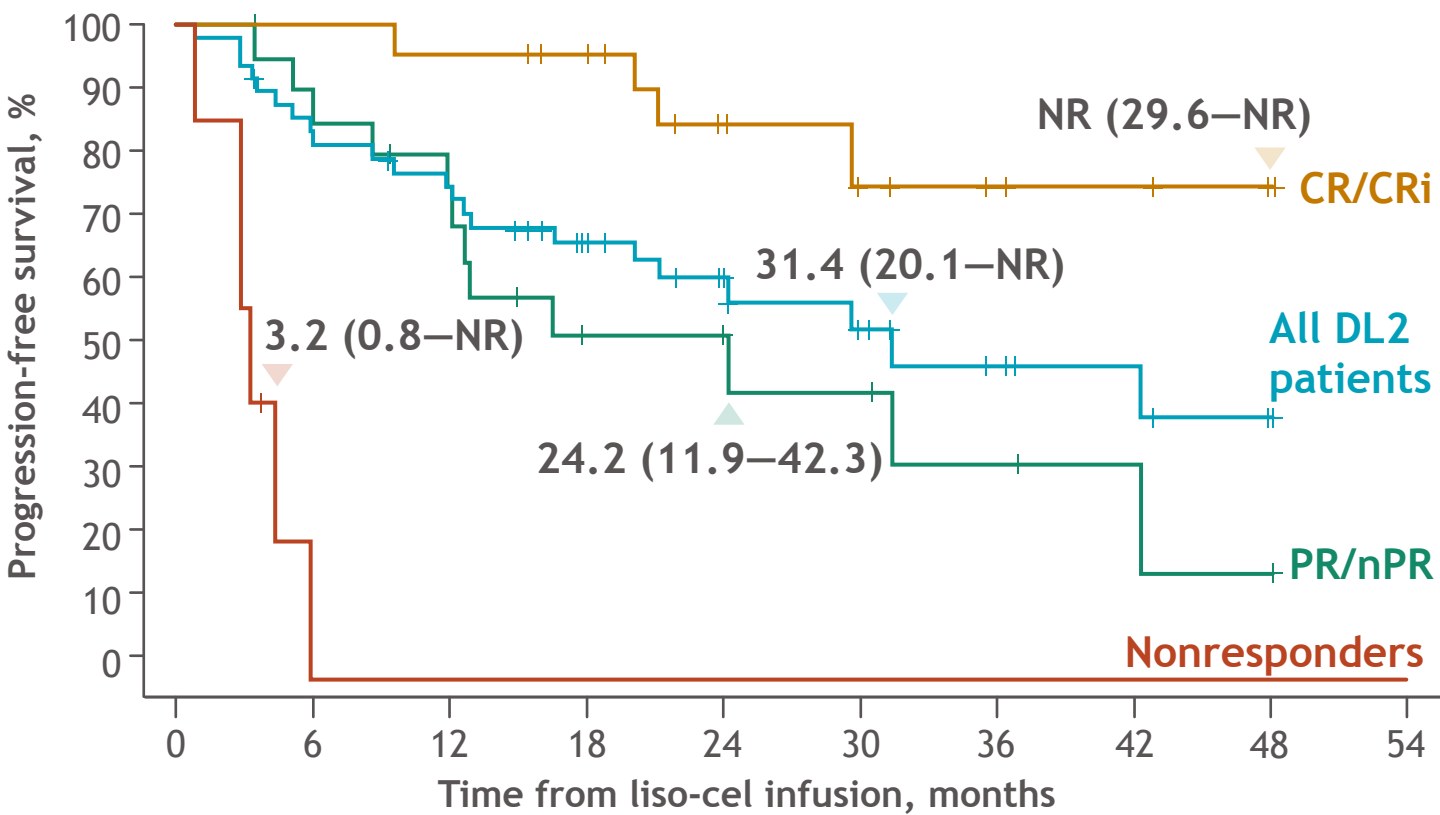
uMRD4 rate



<sup>a</sup>Forty-nine patients (22 with CR/CRi) were evaluable for MRD in marrow.

# Progression-free survival by best overall response at DL2

Median (95% CI) follow-up for PFS: 24.3 months (23.7–35.5)



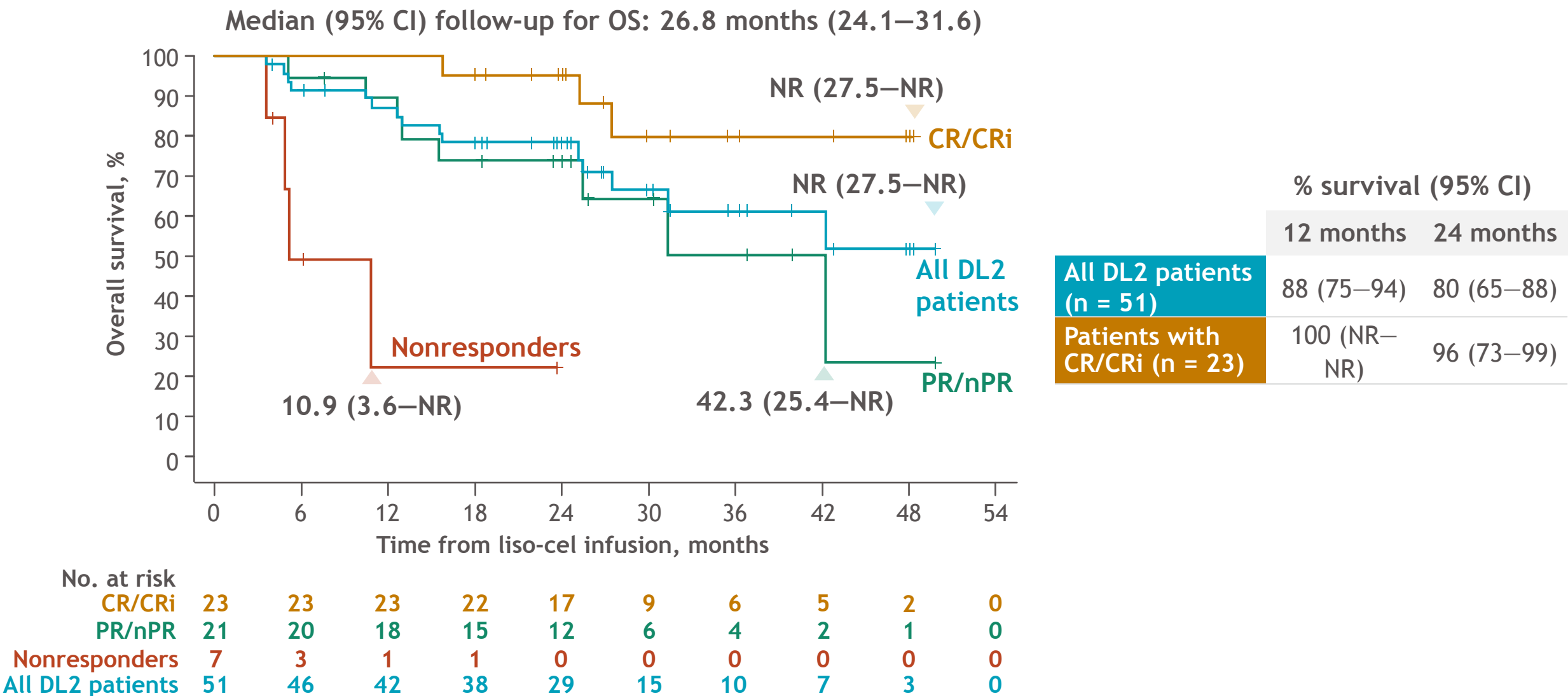
% progression free  
(95% CI)

	12 months	24 months
All DL2 patients (n = 51)	76 (61–85)	62 (46–74)
Patients with CR/CRi (n = 23)	96 (73–99)	85 (60–95)

No. at risk										
CR/CRi	23	23	22	20	12	7	5	4	2	0
PR/nPR	21	17	14	7	6	5	3	2	1	0
Nonresponders	7	0	0	0	0	0	0	0	0	0
All DL2 patients	51	40	36	27	18	12	8	6	3	0

Data on KM curves are expressed as median (95% CI). No formal landmarking analyses were conducted.

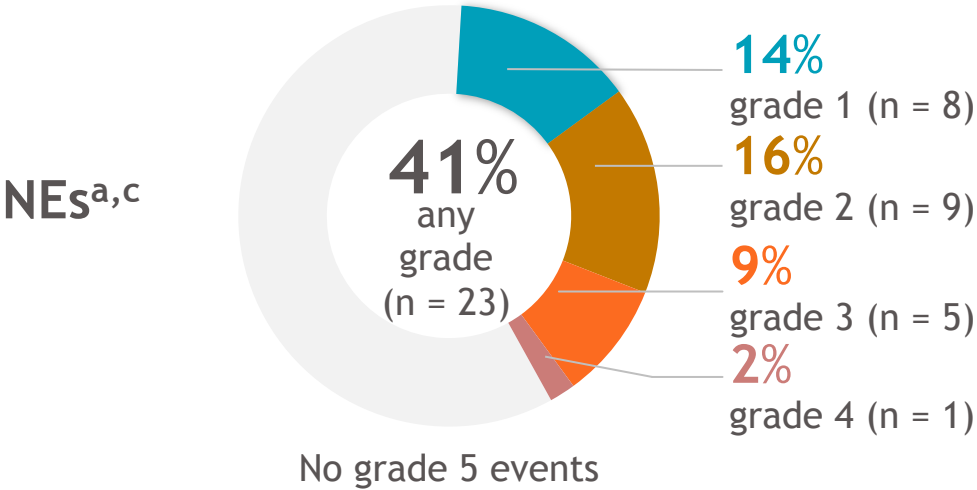
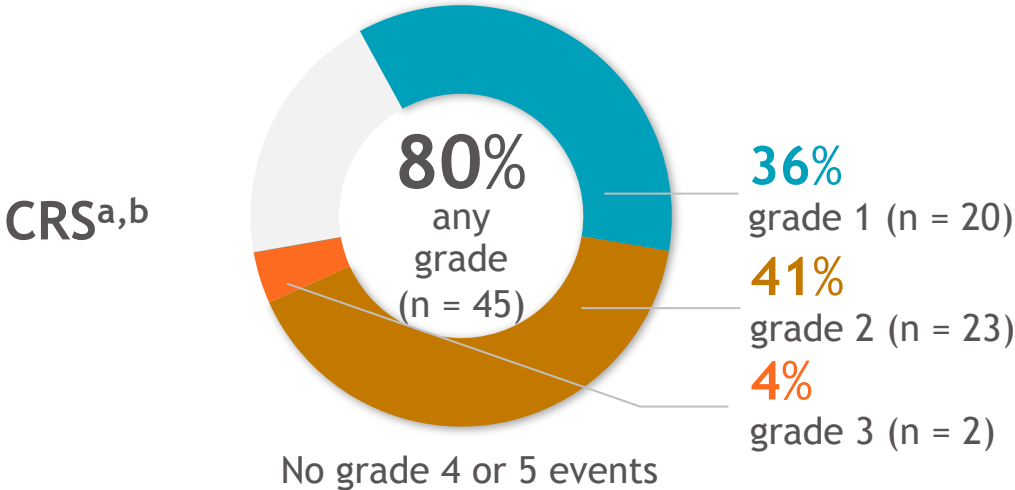
# Overall survival by best overall response at DL2



Data on KM curves are expressed as median (95% CI). No formal landmarking analyses were conducted.



# Safety: incidence of CRS and NEs



	Total combination-treated set (n = 56)
Median (range) days to CRS onset	7 (1–14)
Median (range) days to CRS resolution	5 (2–18)
Received tocilizumab and/or corticosteroids for CRS and/or NE, n (%)	33 (59)

	Total combination-treated set (n = 56)
Median (range) days to NE onset	8 (1–15)
Median (range) days to NE resolution	8 (1–362)
Received tocilizumab and/or corticosteroids for CRS and/or NE, n (%)	33 (59)

<sup>a</sup>Summed percentages for grouped grades within each graph may not equal the any-grade percentage due to rounding; <sup>b</sup>CRS was graded based on Lee 2014 criteria; <sup>c</sup>NEs were defined as -INV-identified neurological AEs related to liso-cel.

# Agenda







**Module 1: Selection and Sequencing of Therapy for Relapsed/Refractory (RR) Chronic Lymphocytic Leukemia (CLL)**  
— Dr Wierda

**Module 2: First-Line Therapy for CLL — Dr Coombs**

**Module 3: Novel Agents and Strategies for RR CLL — Dr Wierda**

**Module 4: ASCO and EHA 2025**

Regulatory and reimbursement issues aside, outside of a clinical trial, have you or would you administer a BTKi inhibitor in combination with venetoclax +/- an anti-CD20 antibody as first-line treatment for CLL?  
If you were going to administer a BTKi in combination with venetoclax +/- an anti-CD20 antibody as first-line treatment for CLL, which would be your preferred BTKi?

		BTK inhibitor + venetoclax +/- anti-CD20 antibody	Preferred BTK inhibitor
	Dr Coombs	I have	Acalabrutinib
	Dr Wierda	I have	Ibrutinib
	Dr Allan	I have	Zanubrutinib
	Dr Davids	I have	Acalabrutinib
	Dr Sharman	I haven't but would for the right patient	Acalabrutinib
	Dr Siddiqi	I haven't but would for the right patient	Zanubrutinib

Regulatory and reimbursement issues aside, in what specific clinical situations would you prefer to administer the time-limited regimen of a BTK inhibitor in combination with venetoclax with or without an anti-CD20 antibody as first-line therapy for CLL?



**Dr Coombs**

**AV: pt desiring time limited but prefers all oral  
AVO: pt desiring time limited with higher-risk markers**



**Dr Wierda**

**This is my preferred first-line treatment approach**



**Dr Allan**

**Bulky unmutated IGHV del(17p) or del(11q) CLL**



**Dr Davids**

**AV: older pts/those with comorbidities and low-risk genetics  
AVO: younger or fit pts/those with higher-risk genetics desiring time-limited therapy**



**Dr Sharman**

**Bulky nodes, higher risk for TLS, patient preference**



**Dr Siddiqi**

**Younger patient, high-risk cytogenetics, desire for fixed-duration therapy but not keen on multiple infusions**

AV = acalabrutinib and venetoclax; AVO = acalabrutinib, venetoclax and obinutuzumab; TLS = tumor lysis syndrome

Regulatory and reimbursement issues aside, and assuming equal access to acalabrutinib, zanubrutinib and pirtobrutinib, in general, which BTK inhibitor would you prefer to administer as first-line treatment for CLL?



**Dr Coombs**

**Zanubrutinib**



**Dr Wierda**

**Acalabrutinib or zanubrutinib**



**Dr Allan**

**Zanubrutinib**



**Dr Davids**

**Acalabrutinib**



**Dr Sharman**







**Zanubrutinib**









**Dr Siddiqi**

**Zanubrutinib**

Regulatory and reimbursement issues aside, what would be your preferred initial regimen for a patient with CLL and an IGHV mutation and no del(17p) or TP53 mutation requiring treatment?







		60-year-old patient	80-year-old patient
	Dr Coombs	Venetoclax + obinutuzumab	Venetoclax + obinutuzumab
	Dr Wierda	Venetoclax + obinutuzumab	Venetoclax + obinutuzumab
	Dr Allan	Venetoclax + obinutuzumab	Zanubrutinib
	Dr Davids	Venetoclax + obinutuzumab	Venetoclax + obinutuzumab
	Dr Sharman	Venetoclax + obinutuzumab	Venetoclax + obinutuzumab
	Dr Siddiqi	Venetoclax + obinutuzumab	Venetoclax + obinutuzumab

Regulatory and reimbursement issues aside, what would be your preferred initial regimen for a patient with CLL and no IGHV mutation or del(17p) or TP53 mutation requiring treatment?

		60-year-old patient	80-year-old patient
	Dr Coombs	Venetoclax + obinutuzumab	Zanubrutinib
	Dr Wierda	Ibrutinib + venetoclax	Acalabrutinib + venetoclax; acalabrutinib + venetoclax + obinutuzumab
	Dr Allan	Zanubrutinib + venetoclax + obinutuzumab	Zanubrutinib
	Dr Davids	Venetoclax + obinutuzumab	Venetoclax + obinutuzumab
	Dr Sharman	Acalabrutinib + obinutuzumab	Zanubrutinib
	Dr Siddiqi	Venetoclax + obinutuzumab	Zanubrutinib



Regulatory and reimbursement issues aside, what would be your preferred initial regimen for a patient with CLL and no IGHV mutation but with a del(17p) or TP53 mutation requiring treatment?

		60-year-old patient	80-year-old patient
	Dr Coombs	Zanubrutinib	Zanubrutinib
	Dr Wierda	Ibrutinib + venetoclax	Acalabrutinib or zanubrutinib
	Dr Allan	Zanubrutinib + venetoclax + obinutuzumab → zanubrutinib	Zanubrutinib
	Dr Davids	Zanubrutinib	Zanubrutinib
	Dr Sharman	Zanubrutinib + venetoclax	Zanubrutinib
	Dr Siddiqi	Zanubrutinib + venetoclax	Zanubrutinib



# First-line therapy for chronic lymphocytic leukemia

Callie Coombs, MD

Associate Clinical Professor

University of California Irvine

# What do the guidelines say?

**SUGGESTED TREATMENT REGIMENS<sup>a,b,c,d</sup>**  
**CLL/SLL Without del(17p)/TP53 Mutation**  
 (alphabetical by category)

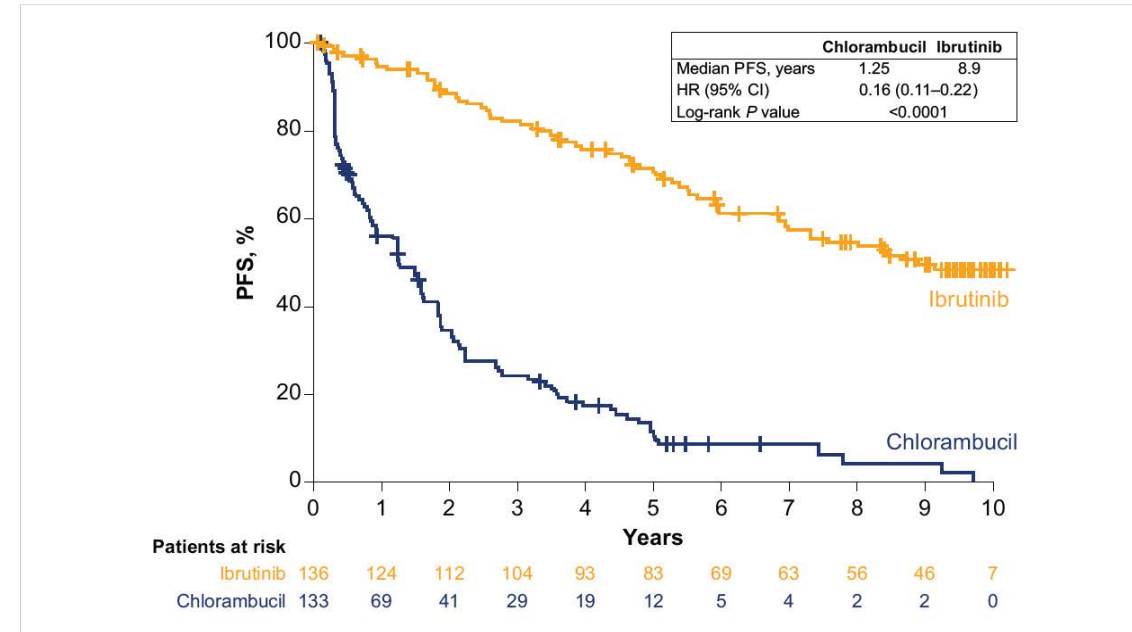
FIRST-LINE THERAPY <sup>e</sup>		
<u>Preferred Regimens</u>	<u>Other Recommended Regimens</u>	<u>Useful in Certain Circumstances</u>
<ul style="list-style-type: none"> <li>• BCL2i-containing regimens               <ul style="list-style-type: none"> <li>▸ Venetoclax<sup>f,h</sup> + obinutuzumab (category 1)</li> <li>▸ Venetoclax<sup>f,h</sup> + acalabrutinib ± obinutuzumab (category 1)</li> </ul> </li> <li>• cBTKi-based regimens               <ul style="list-style-type: none"> <li>▸ Acalabrutinib<sup>f,g</sup> ± obinutuzumab (category 1)</li> <li>▸ Zanubrutinib<sup>f,g</sup> (category 1)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• BCL2i-containing regimen               <ul style="list-style-type: none"> <li>▸ Venetoclax<sup>f,h</sup> + ibrutinib<sup>f,g</sup></li> </ul> </li> <li>• cBTKi-based regimen               <ul style="list-style-type: none"> <li>▸ Ibrutinib<sup>f,g,i</sup> (category 1)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Consider for IGHV-mutated CLL in patients aged &lt;65 y without significant comorbidities               <ul style="list-style-type: none"> <li>▸ FCR (fludarabine, cyclophosphamide, rituximab)<sup>j,k</sup></li> </ul> </li> <li>• cBTKi-based regimen               <ul style="list-style-type: none"> <li>▸ Ibrutinib<sup>f,g</sup> + anti-CD20 mAb (category 2B)<sup>l</sup></li> </ul> </li> <li>• Consider when cBTKi and BCL2i are not available or contraindicated or rapid disease debulking needed               <ul style="list-style-type: none"> <li>▸ Bendamustine<sup>m</sup> + anti-CD20 mAb<sup>l,n</sup></li> <li>▸ Obinutuzumab ± chlorambucil<sup>o</sup></li> <li>▸ High-dose methylprednisolone (HDMP) + anti-CD20 mAb<sup>l</sup> (category 2B; category 3 for patients &lt;65 y without significant comorbidities)</li> </ul> </li> </ul>

- Guidelines for patients *with* 17p/TP53 mutation are similar but advise *against* CIT (and no category 1 regimens in first-line)

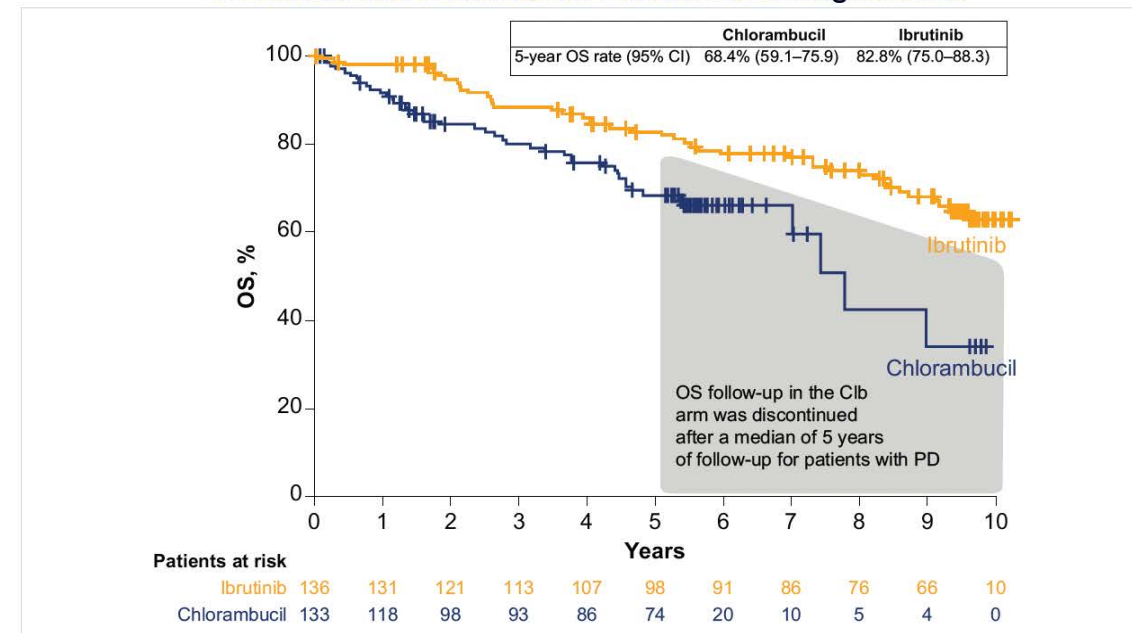
# Ibrutinib provides **long-term** disease control

- With up to 10-years of follow up from RESONATE-2 trial demonstrates median PFS of 8.9 years for ibrutinib-treated patients compared to 1.3 years for chlorambucil-treated patients

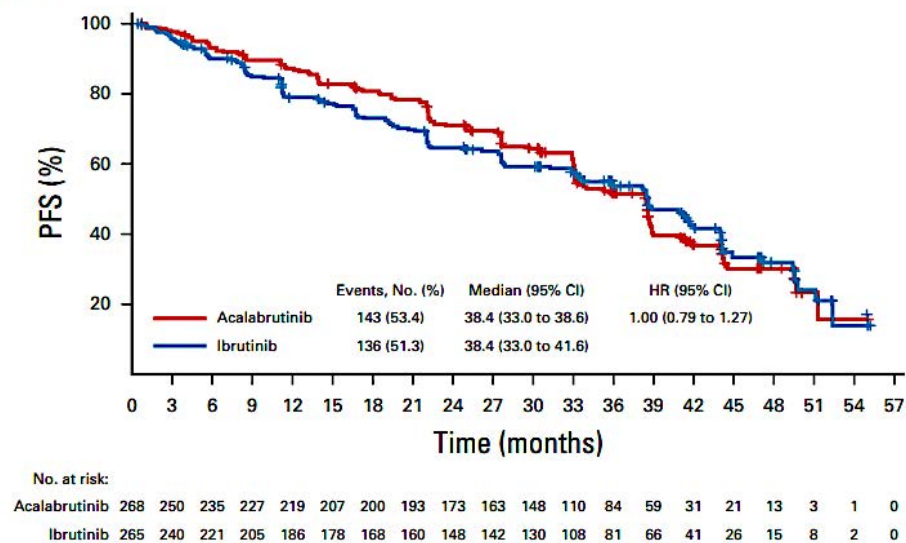
At Final Analysis, Median PFS With Ibrutinib Was Reached at 8.9 Years



OS Benefit Was Sustained for Patients Receiving Ibrutinib

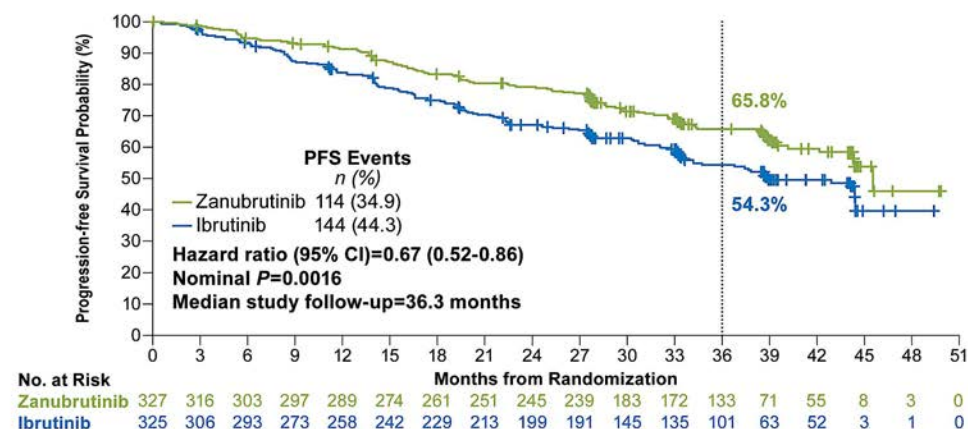


# Ibrutinib is no longer a favored BTKi due to toxicity profile



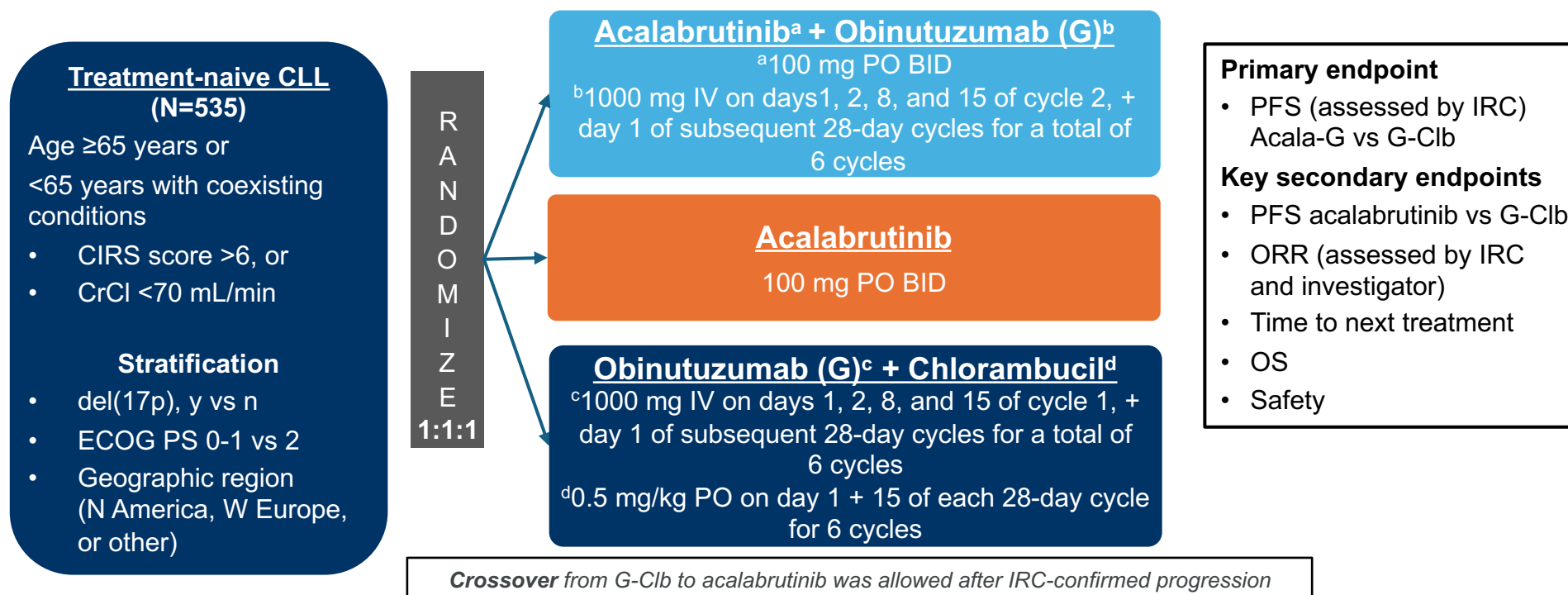
ELEVATE-RR: Acalabrutinib has non-inferior efficacy to ibrutinib in high-risk relapsed population, but superior safety ↓afib/flutter, ↓HTN

Figure 1. Investigator-Assessed Progression-Free Survival (ITT Population)



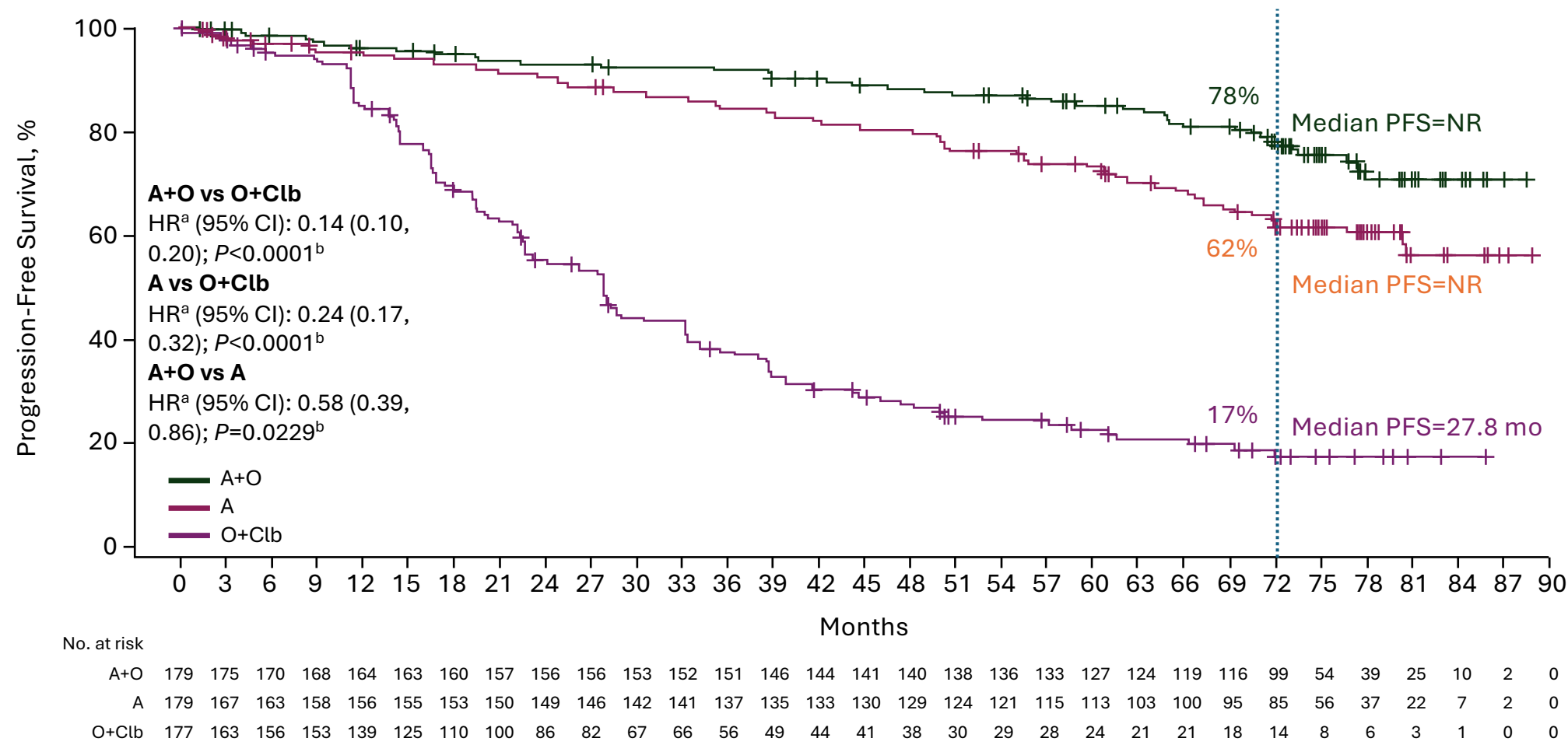
ALPINE: Zanubrutinib has superior efficacy vs. ibrutinib in all-comer relapsed population, also superior safety ↓afib/flutter, but similar HTN

# ELEVATE TN: Study Design



- Interim analysis was planned based on events (after occurrence of ~111 IRC-assessed PFS events in the combination therapy arms) or after 24 months if the required number of events was not met by this time

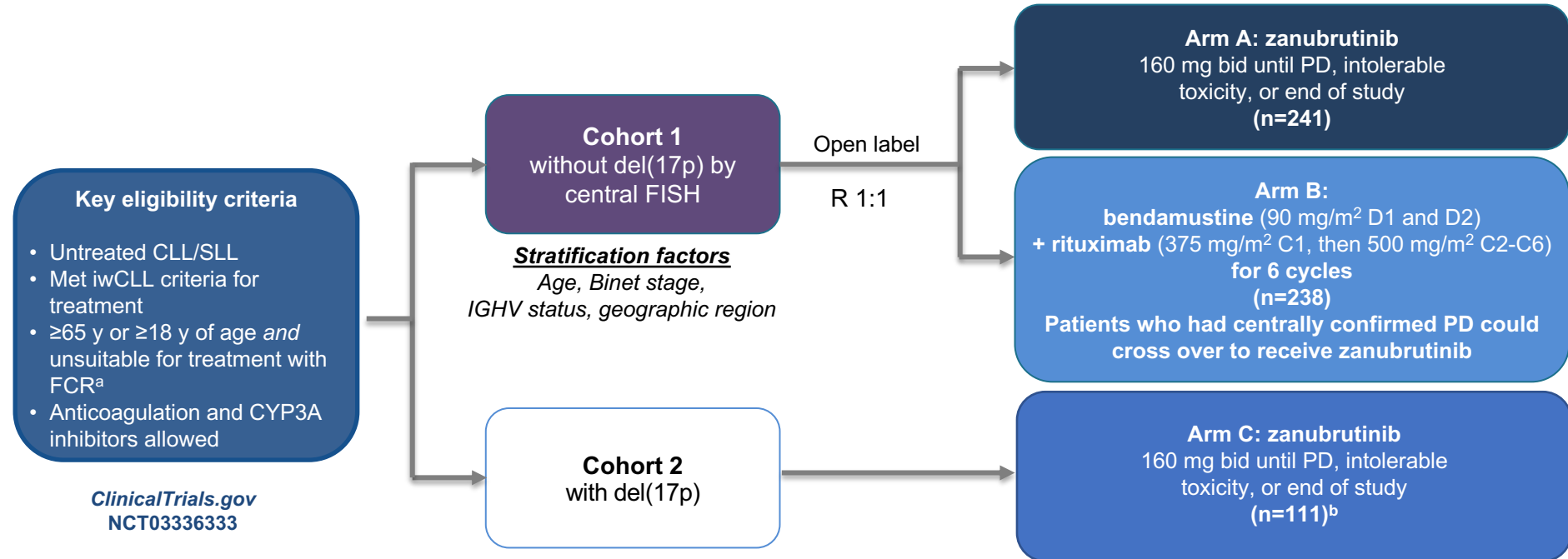
# Median PFS was significantly higher for A-containing arms vs O+Clb



- Median PFS was significantly higher for A+O vs A

<sup>a</sup>Hazard ratio based on stratified Cox proportional-hazards model.  
<sup>b</sup>*P*-value based on stratified log-rank test.  
Sharman et al. ASH 2023

# SEQUOIA study design



## Assessments

- Response assessments were conducted every 12 weeks from start of C1 for 96 weeks and every 24 weeks until PD
- CR/CRi confirmed via bone marrow biopsy
- AEs documented until PD or start of next CLL therapy

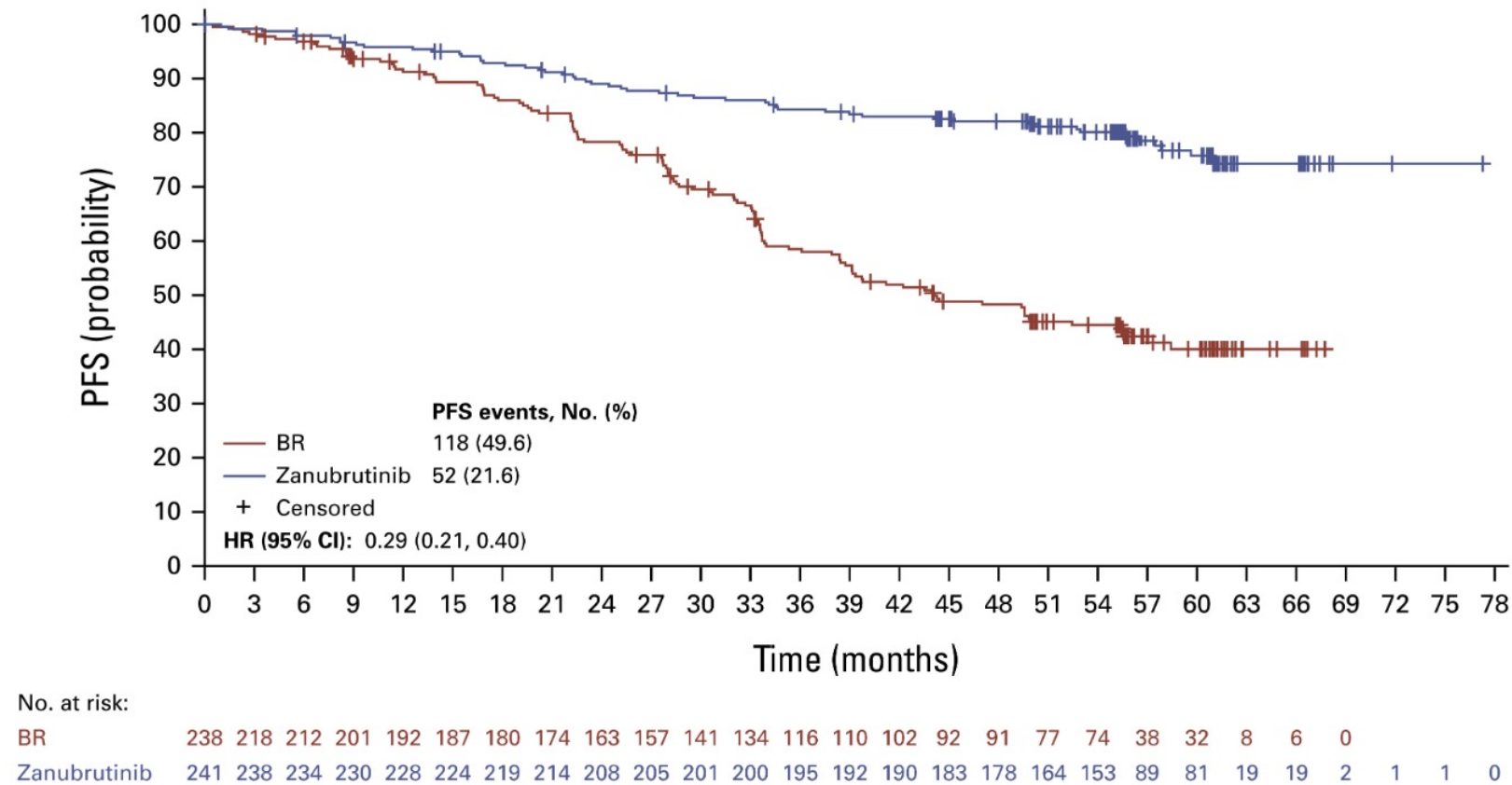
## Statistical analysis

- Efficacy endpoints analyzed using ITT analysis and the per-protocol analysis set
- Safety was assessed in all pts who received  $\geq 1$  dose of treatment

## Outcomes

- PFS assessed by investigator
- OS in cohorts 1 and 2
- PFS 2<sup>c</sup>
- Clinical outcomes (correlated with baseline prognostic and predictive markers)
- Safety

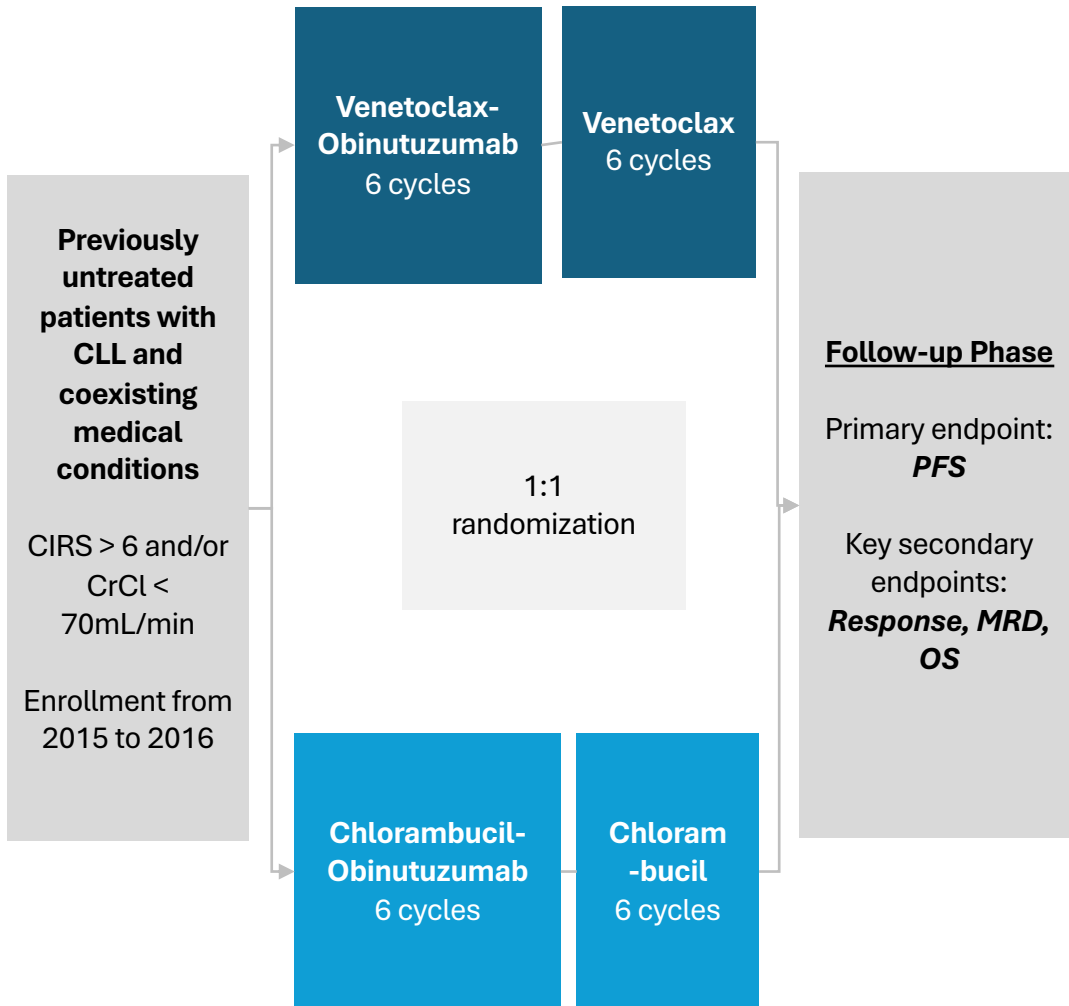
# 5-year SEQUOIA follow up



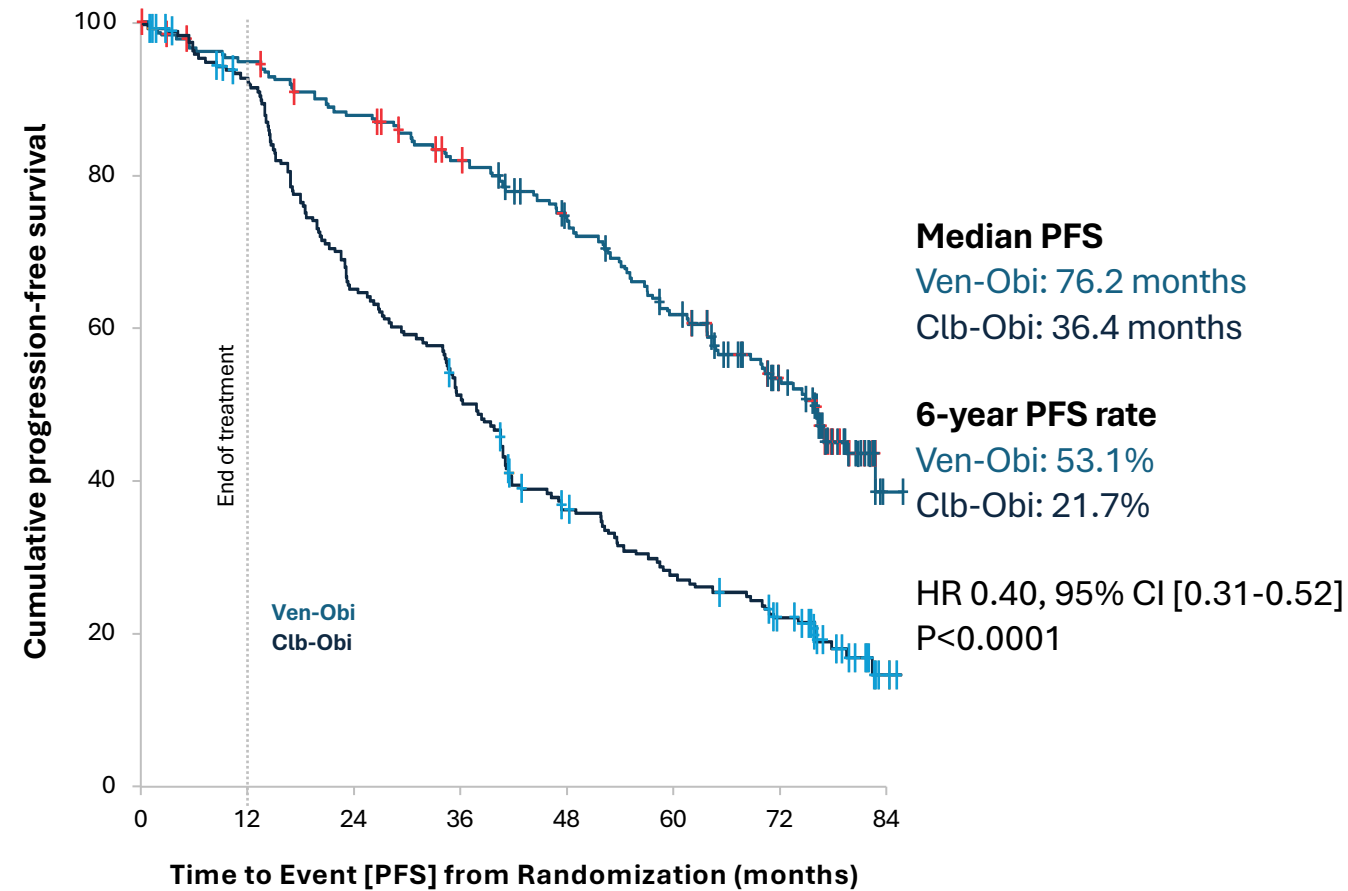


# Phase III CLL14 Study: 6-Year Update

## Study Design



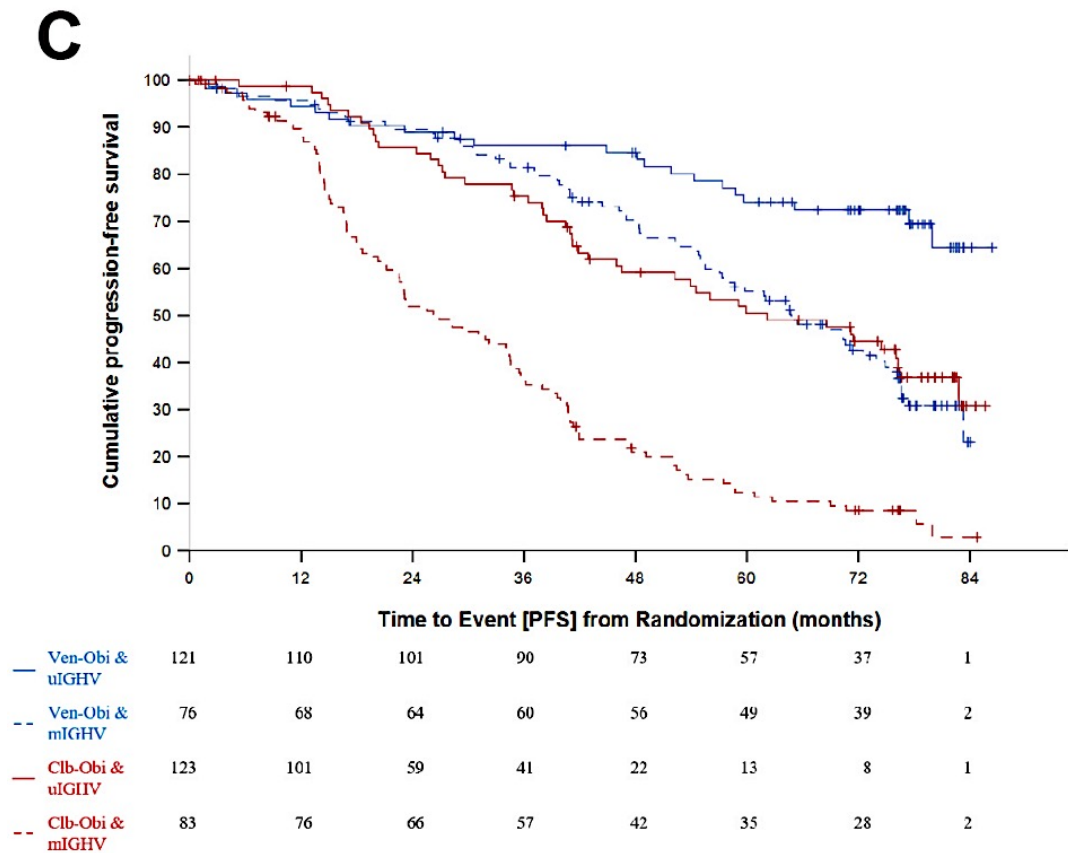
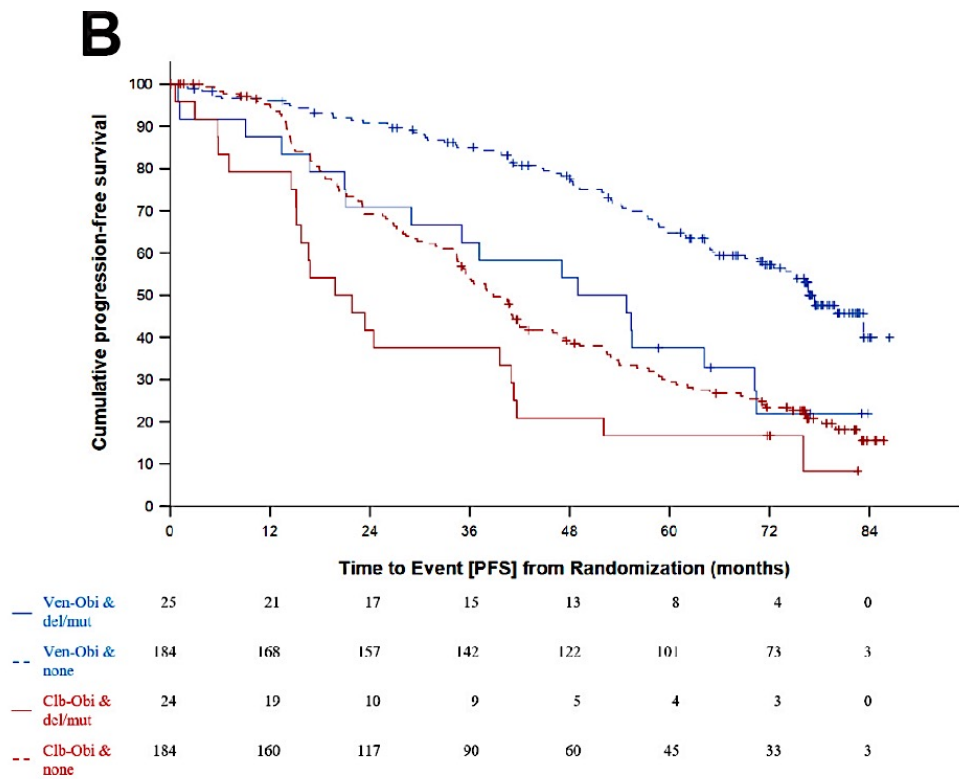
## Investigator Assessed Progression-Free Survival



# Venetoclax in frontline setting: CLL14 trial

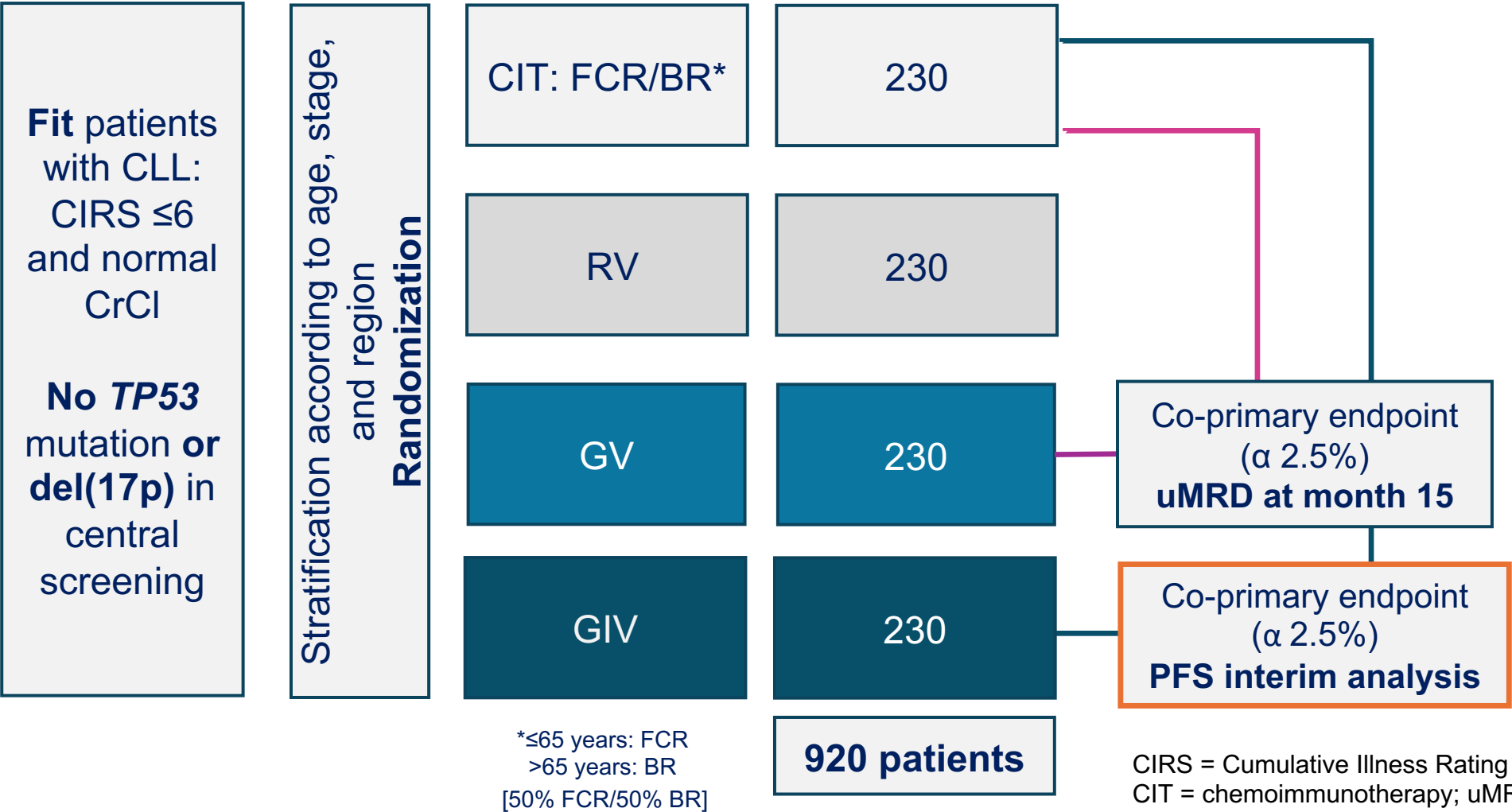
Updates from 6 year follow up:

- Median PFS reached: 76.2 months
- Median PFS for TP53 aberrant pts: 51.9 months
- Median PFS for unmut IGHV pts: 64.8 months



# GAIA/CLL13 Study Design for **Fit Patients** With CLL

Chemoimmunotherapy (**FCR/BR**) vs **Rituximab + Venetoclax** vs Obinutuzumab (**G**) + **V** vs **G** + Ibrutinib + **V**  
Recruitment in 10 countries (DE, AT, CH, NL, BE, DK, SE, FI, IE, IL)



CIRS = Cumulative Illness Rating Scale;  
CIT = chemoimmunotherapy; uMRD = undetectable minimal residual disease

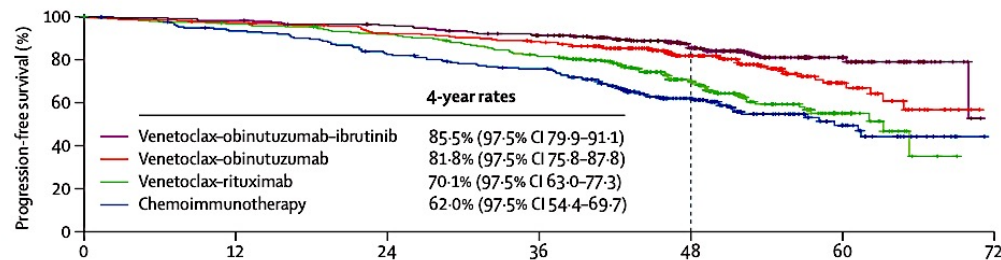
# 4-year follow up of CLL13 trial support VO-containing regimen superiority

A

Venetoclax-obinutuzumab-ibrutinib vs chemoimmunotherapy: HR 0.30 (97.5% CI 0.19-0.47), log-rank  $p < 0.0001$   
 Venetoclax-obinutuzumab-ibrutinib vs venetoclax-rituximab: HR 0.38 (97.5% CI 0.24-0.59), log-rank  $p < 0.0001$   
 Venetoclax-obinutuzumab-ibrutinib vs venetoclax-obinutuzumab: HR 0.63 (97.5% CI 0.39-1.02), log-rank  $p = 0.031$

Venetoclax-obinutuzumab vs chemoimmunotherapy: HR 0.47 (97.5% CI 0.32-0.69), log-rank  $p < 0.0001$   
 Venetoclax-obinutuzumab vs venetoclax-rituximab: HR 0.57 (97.5% CI 0.38-0.84), log-rank  $p = 0.0011$

Venetoclax-rituximab vs chemoimmunotherapy: log-rank  $p = 0.10$ , proportional hazards assumption not satisfied



Number at risk  
(number censored)

Chemoimmunotherapy	229 (0)	197 (18)	173 (19)	156 (22)	84 (68)	24 (117)	-- (-)
Venetoclax-rituximab	237 (0)	227 (2)	214 (4)	188 (6)	106 (67)	21 (135)	-- (-)
Venetoclax-obinutuzumab	229 (0)	222 (1)	209 (3)	198 (5)	121 (69)	32 (146)	-- (-)
Venetoclax-obinutuzumab-ibrutinib	231 (0)	227 (0)	218 (4)	201 (10)	130 (71)	44 (152)	-- (-)

Unmutated IGHV only

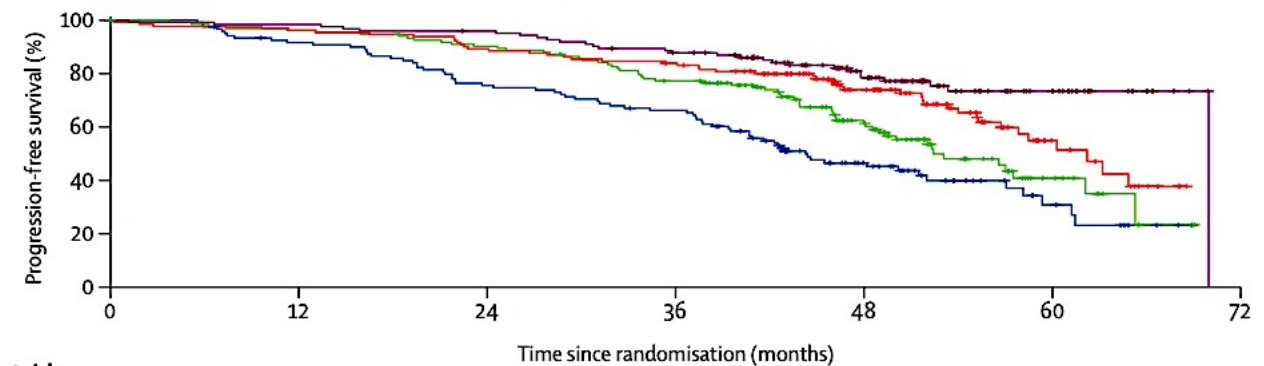


B

Venetoclax-obinutuzumab-ibrutinib vs chemoimmunotherapy: HR 0.27 (95% CI 0.17-0.42),  $p < 0.0001$   
 Venetoclax-obinutuzumab-ibrutinib vs venetoclax-rituximab: HR 0.40 (95% CI 0.25-0.63),  $p < 0.0001$   
 Venetoclax-obinutuzumab-ibrutinib vs venetoclax-obinutuzumab: HR 0.58 (95% CI 0.36-0.94),  $p = 0.025$

Venetoclax-obinutuzumab vs chemoimmunotherapy: HR 0.45 (95% CI 0.31-0.66),  $p < 0.0001$   
 Venetoclax-obinutuzumab vs venetoclax-rituximab: HR 0.65 (95% CI 0.45-0.96),  $p = 0.030$

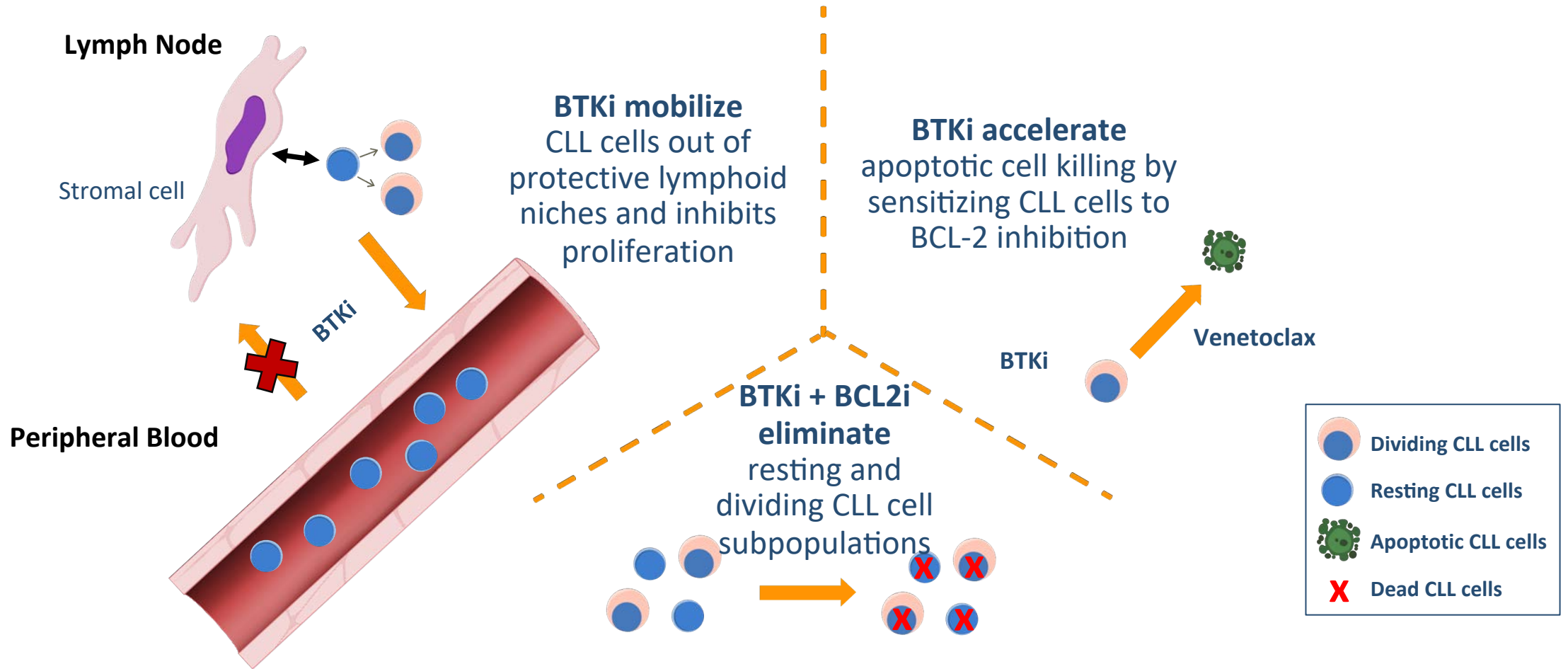
Venetoclax-rituximab vs chemoimmunotherapy: log-rank  $p = 0.015$ , proportional hazards assumption not satisfied



Number at risk  
(number censored)

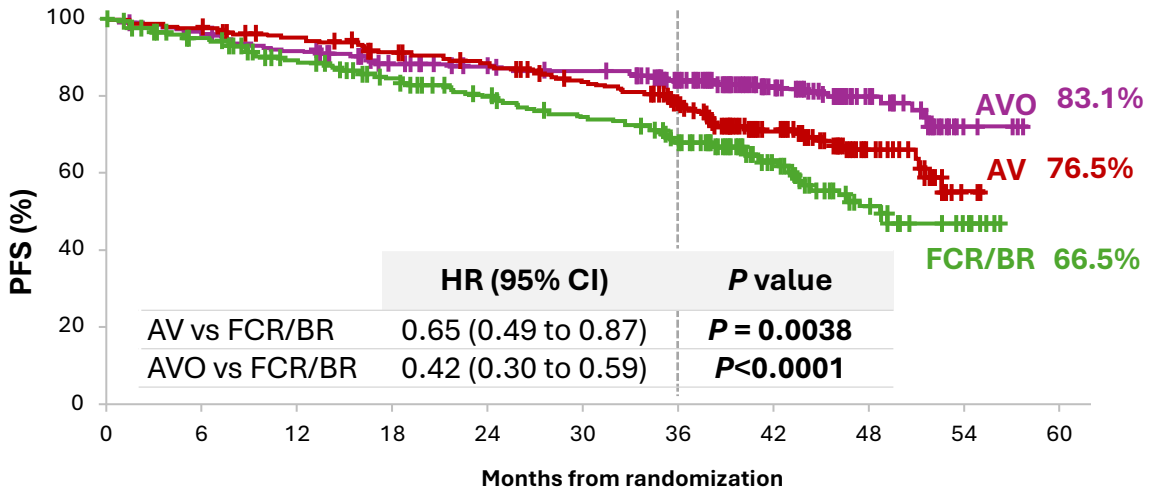
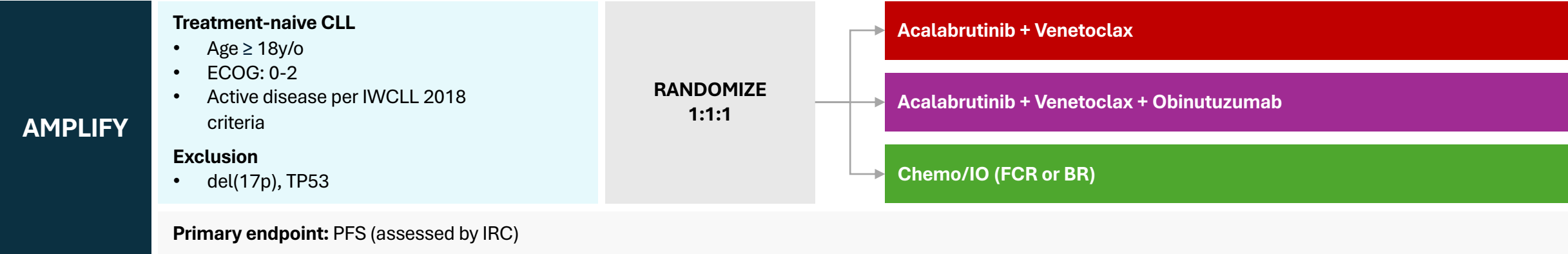
Chemoimmunotherapy	131 (0)	108 (12)	89 (13)	77 (14)	34 (36)	9 (54)	-- (-)
Venetoclax-rituximab	134 (0)	128 (1)	119 (2)	100 (4)	56 (32)	10 (65)	-- (-)
Venetoclax-obinutuzumab	130 (0)	125 (0)	116 (0)	108 (1)	67 (31)	15 (72)	-- (-)
Venetoclax-obinutuzumab-ibrutinib	123 (0)	121 (0)	117 (1)	105 (3)	65 (34)	24 (72)	-- (-)

# Rationale to combine BTKi with BCL2i



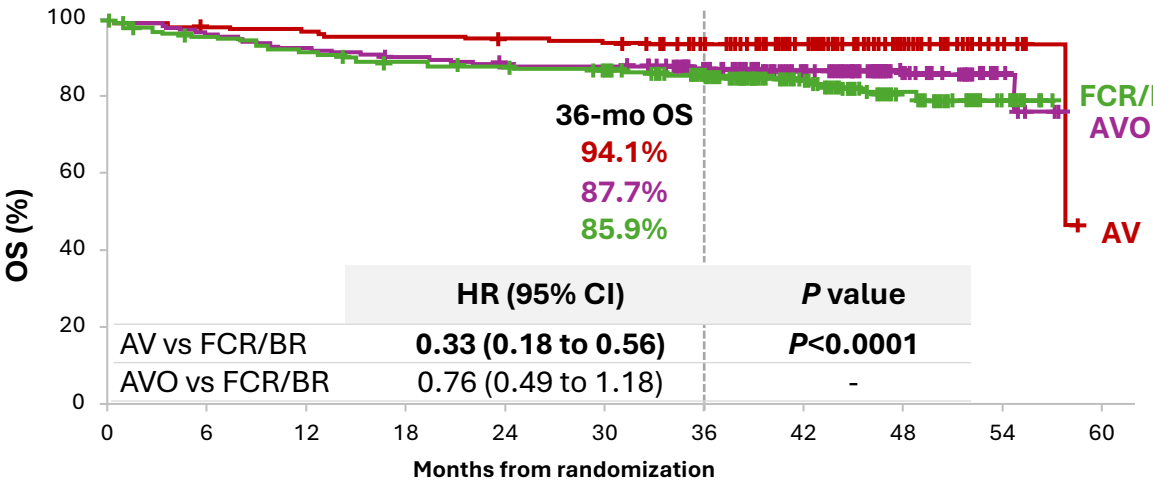
1. Lu P et al. *Blood Cancer J.* 2021; 11:39; 2. Deng J et al. *Leukemia.* 2017; 31:2075-2084; 3. Herman ES et al. *Clin Cancer Res.* 2015; 21:4642-4651; 4. Burger JA et al. *Leukemia.* 2020;34:787-798; 5. Shanafelt T et al. *N Engl J Med.* 2019;381:432-443; 6. Cervantes-Gomez, F. et al. *Clin. Cancer Res.* 2015; 21:3705-3715; 7. Slinger E, et al. *Blood.* 2017; 130: 3018-3018; 8. Haselager MV, et al. *Blood.* 2020 ;136:2918-2926; 9. Slinger E et al. *Leukemia.* 2017 Dec;31(12):2601-2607.

# AMPLIFY: Combination cBTKi and BCL2i Therapy in 1L CLL



Patients at Risk											
AV	291	282	269	251	237	219	177	102	35	3	0
AVO	286	272	258	237	225	219	191	116	51	7	0
FCR/BR	290	236	208	189	170	154	127	66	28	6	0

Median PFS was NR for AV and AVO, and was 47.6 mo for FCR/BR

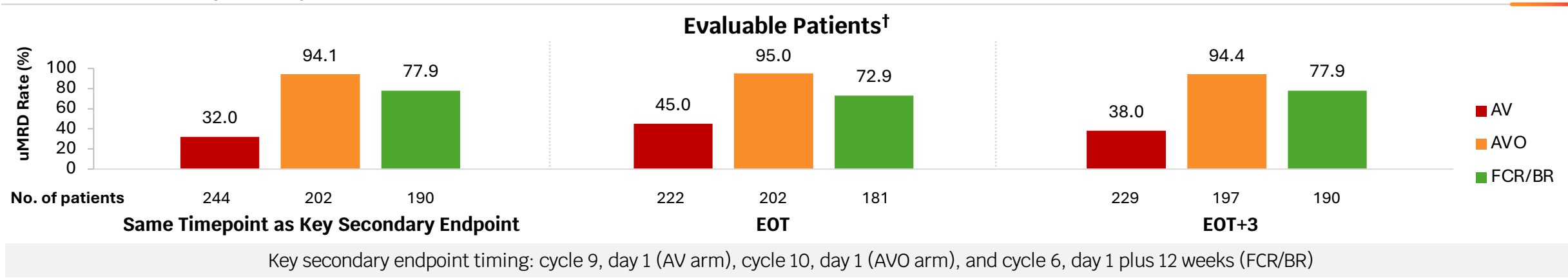


Patients at Risk											
AV	291	286	281	277	275	270	233	142	58	10	0
AVO	286	276	265	257	252	250	223	143	64	10	0
FCR/BR	290	247	236	228	223	217	182	98	45	13	0

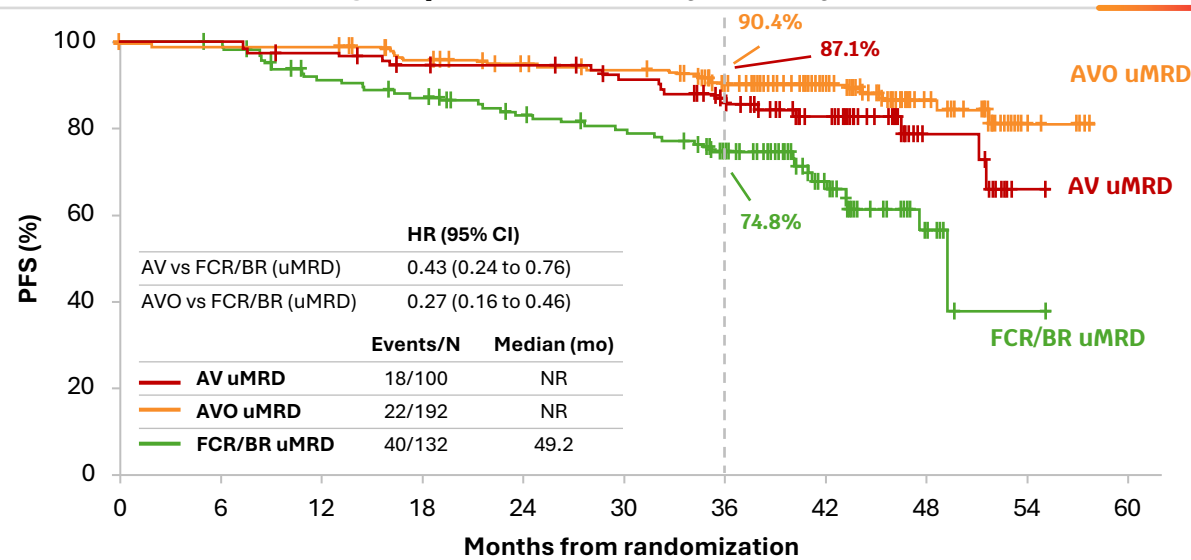
• Brown, JR et. al. Blood. 2024; 144: abstract 1009.

# AMPLIFY: Secondary Endpoints

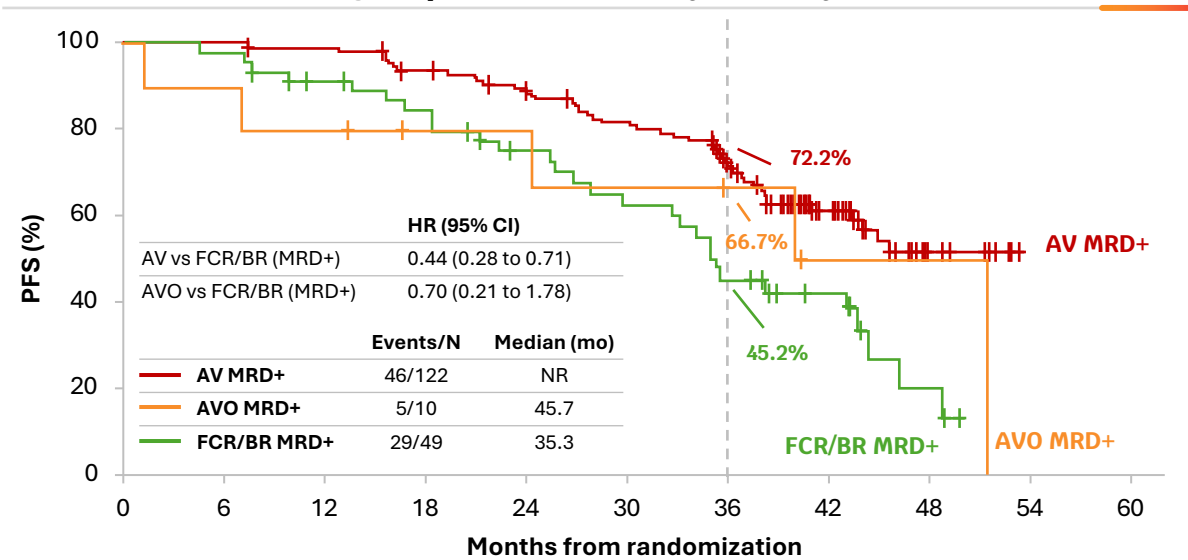
## uMRD Rates (Flow Cytometry [ $<10^{-4}$ ] in PB)



## PFS in the uMRD Subgroup at EOT (Flow Cytometry [ $<10^{-4}$ ] in PB)



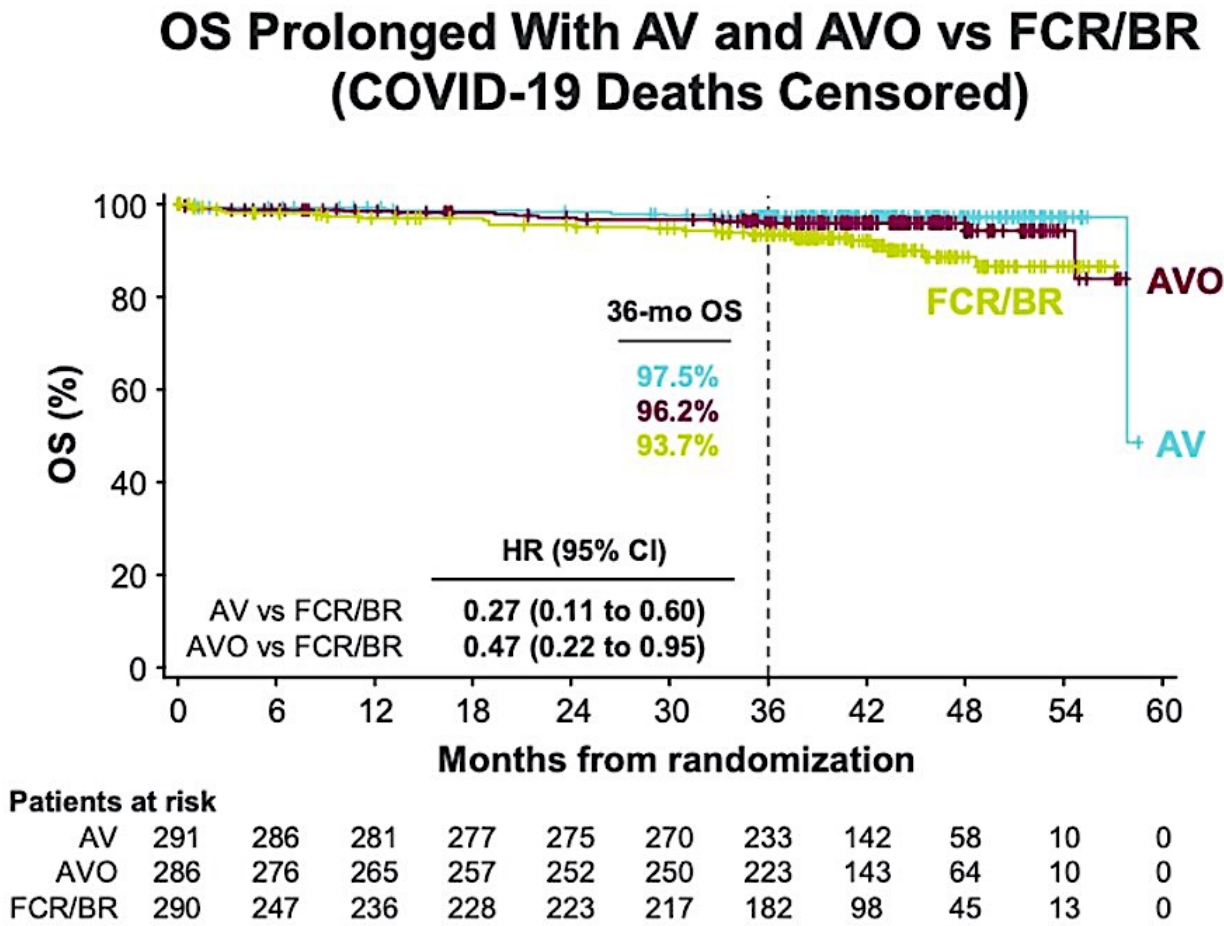
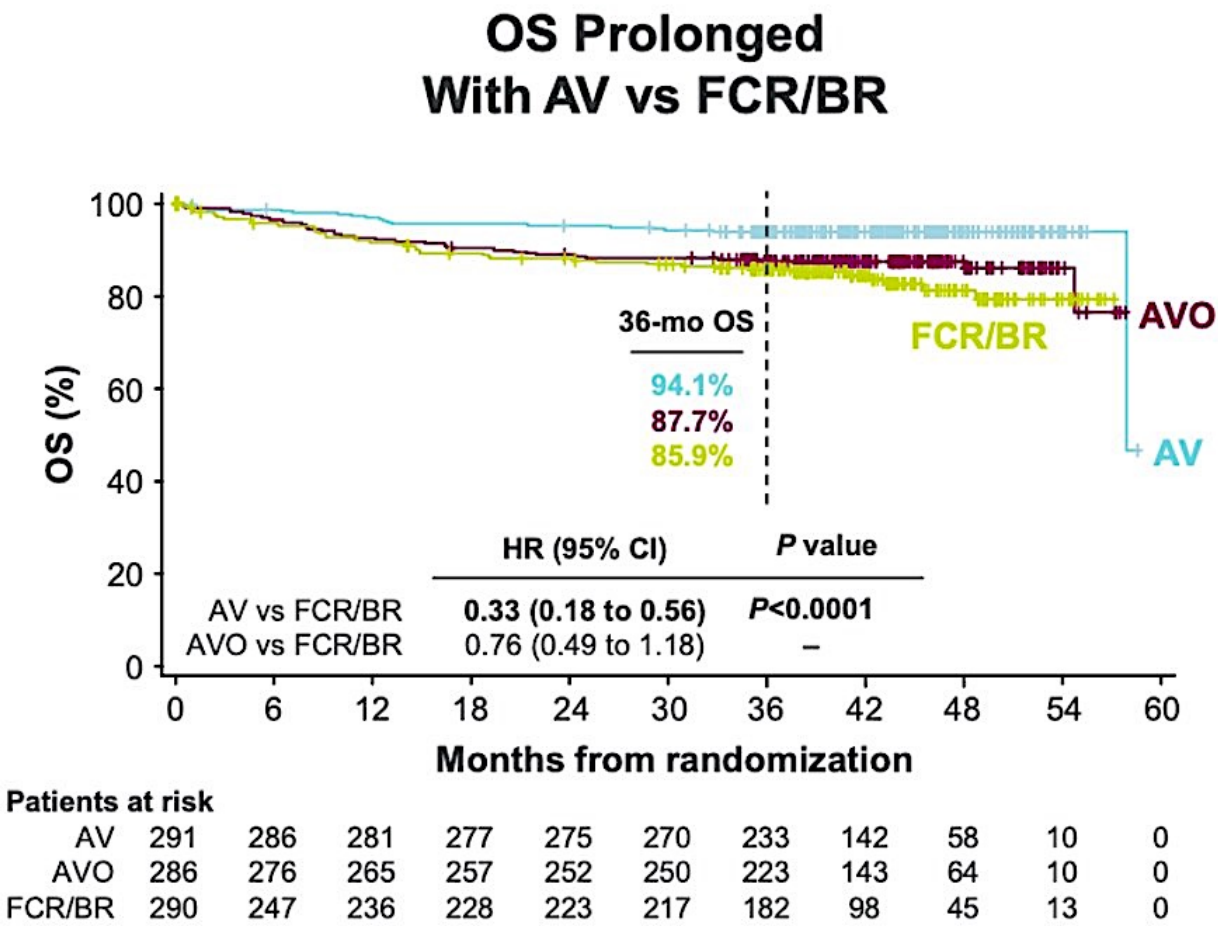
## PFS in the MRD+ Subgroup at EOT (Flow Cytometry [ $<10^{-4}$ ] in PB)



• Brown, JR et. al. Blood. 2024; 144: abstract 1009.



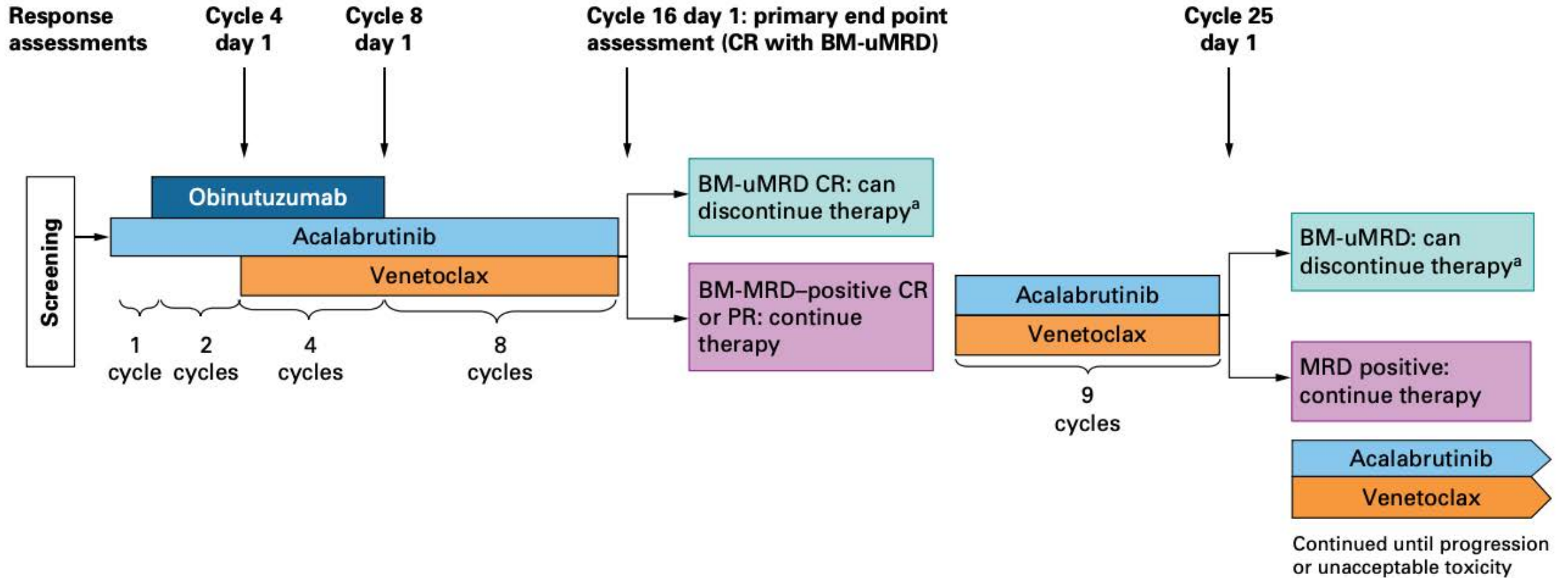
# Overall Survival



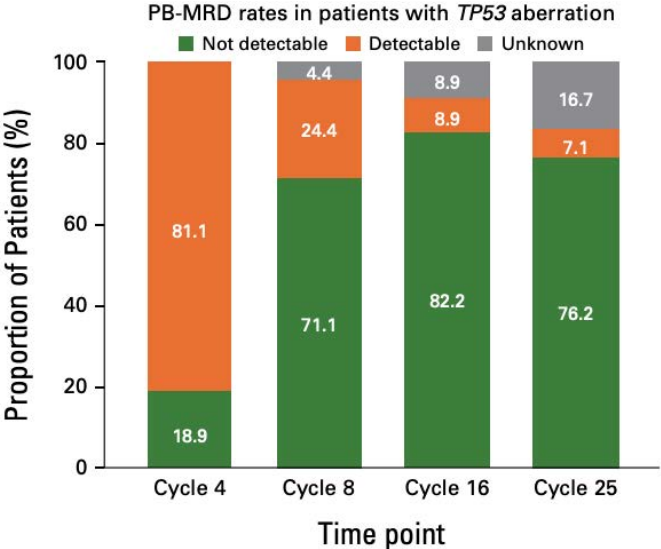
COVID-19 deaths: 10 (AV), 25 (AVO), 21 (FCR/BR)



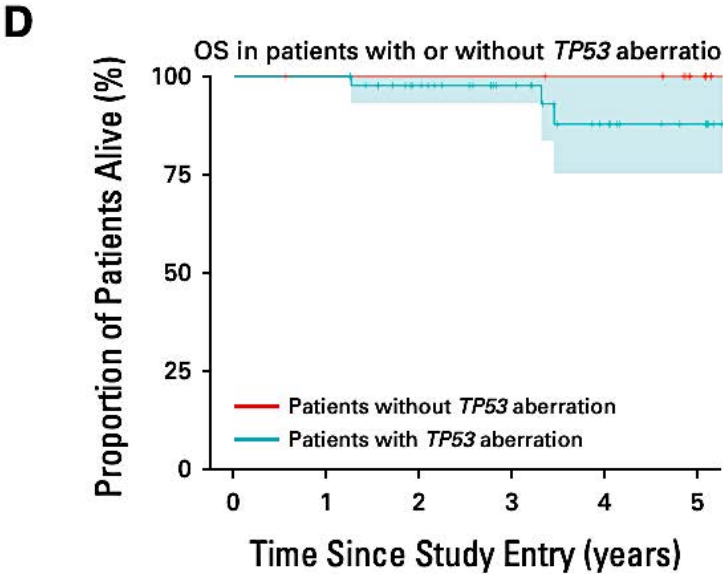
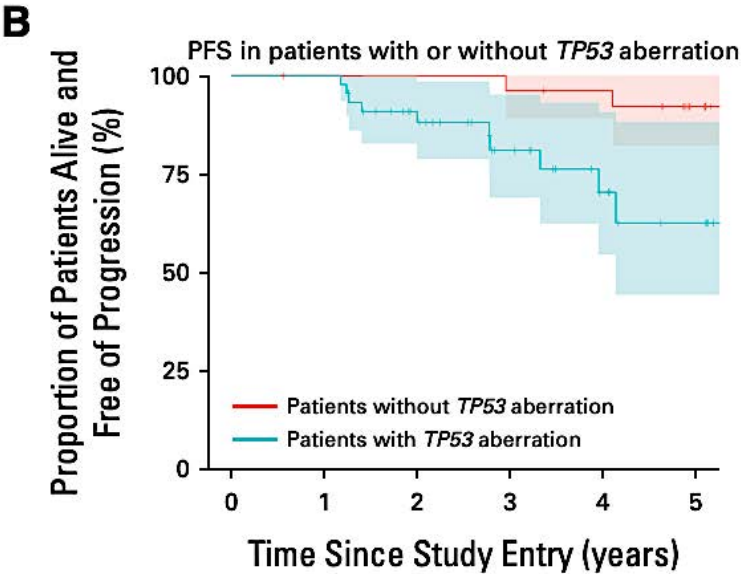
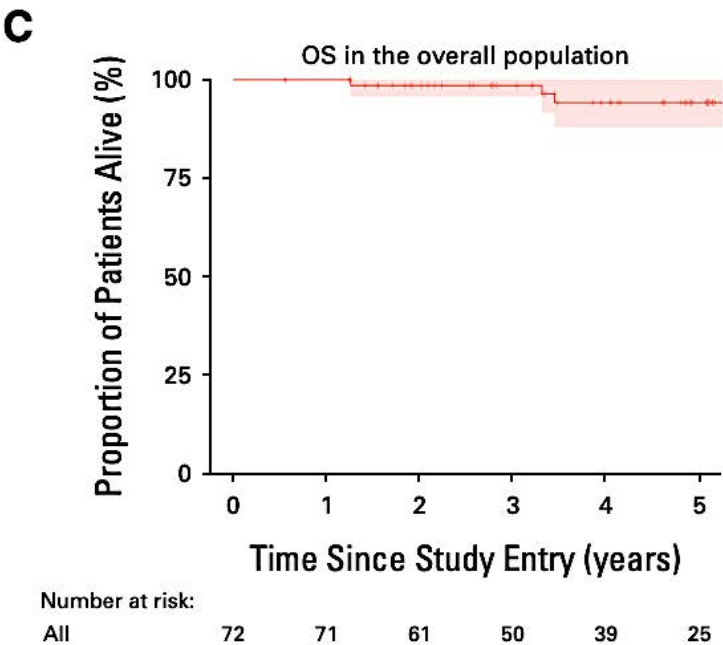
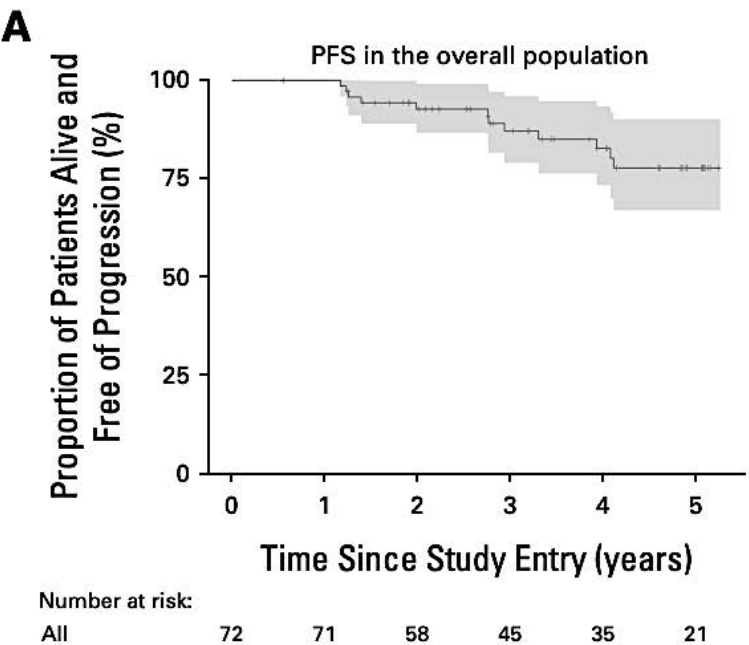
# AVO in patients with TP53 aberrations?



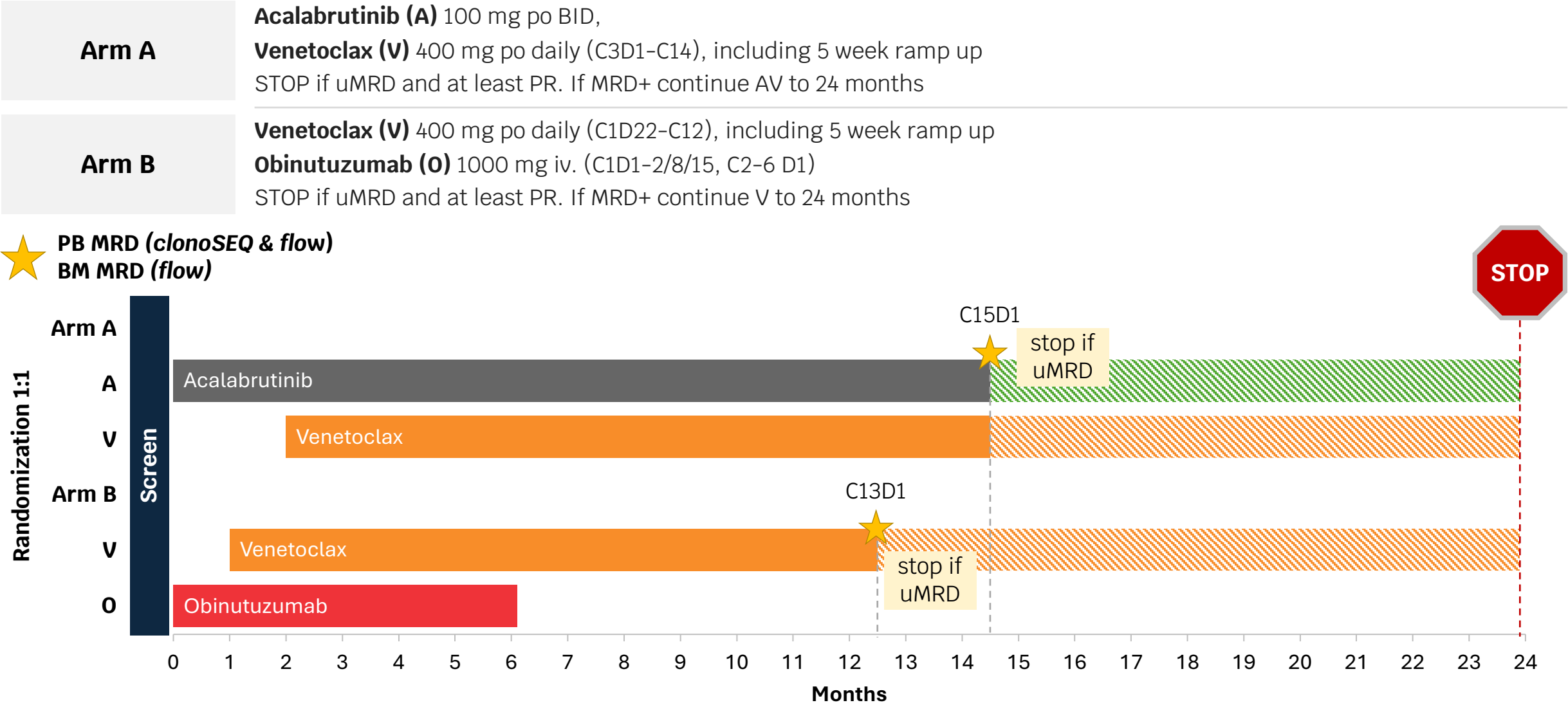
# AVO remains highly effective in high-risk patients



Dauids MS et al, JCO 2024

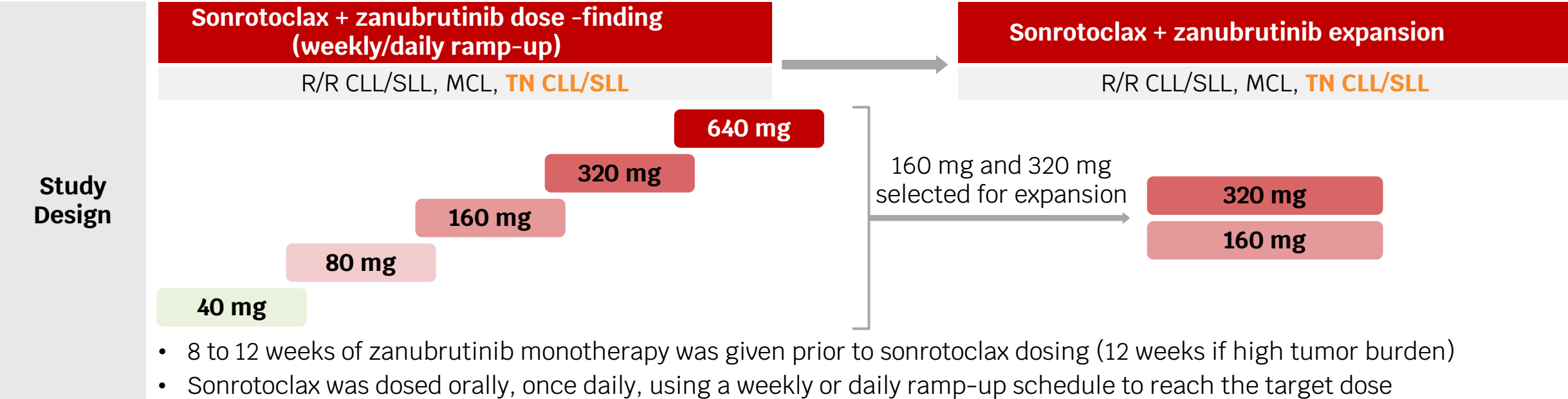


# MAJIC Study Design



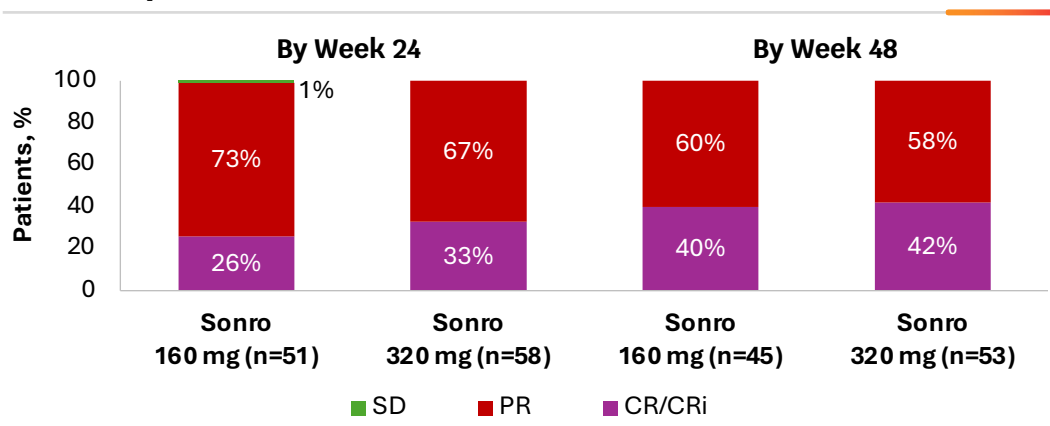
Ryan, C. E., Davids, M. S., Hermann, R., Shahkarami, M., Biondo, J., Abhyankar, S., ... Roeker, L. E. (2022). MAJIC: A Phase III Trial of Acalabrutinib + Venetoclax versus Venetoclax + Obinutuzumab in Previously Untreated Chronic Lymphocytic Leukemia or Small Lymphocytic Lymphoma. *Future Oncology*, 18(33), 3689–3699.

# BGB-11417-101: Phase 1/2 Evaluating Sonrotoclax + Zanu

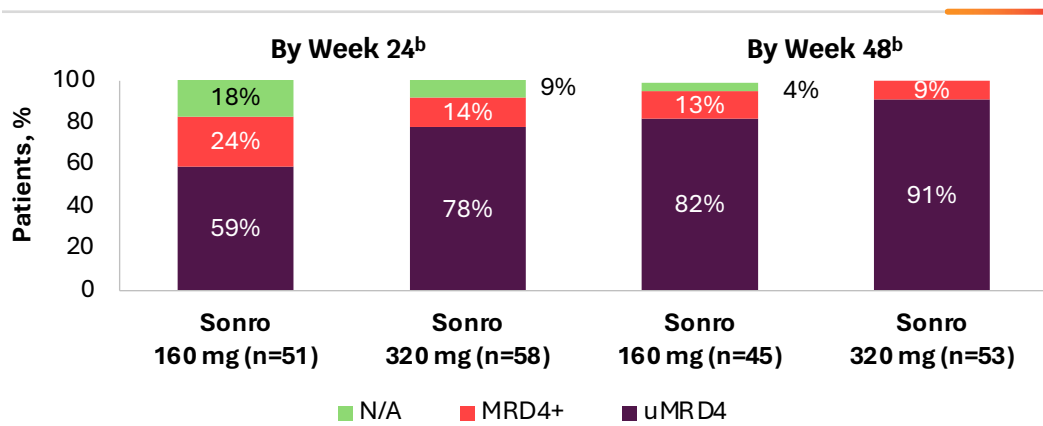


**TN CLL/SLL Responses**

**Best Response<sup>a</sup>**

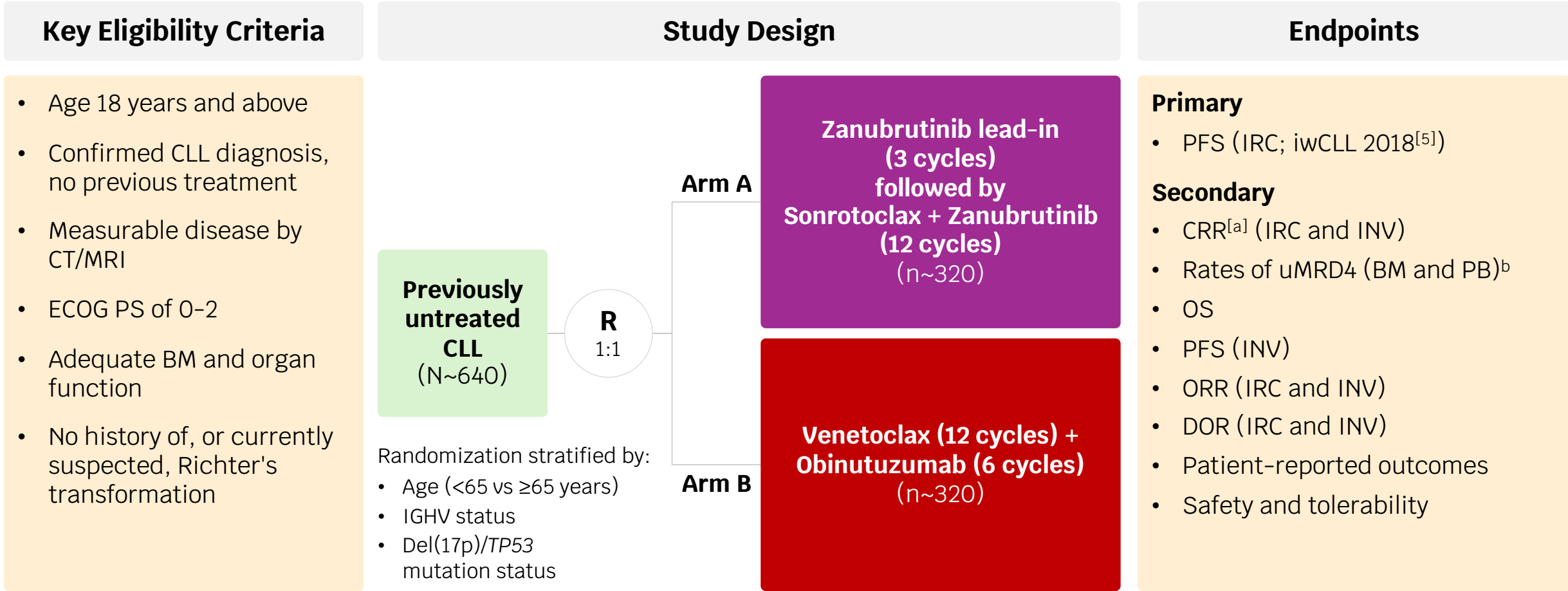


**Best Blood MRD<sup>a</sup>**



# More to come on Zanu + Sonrotoclax in the 1L

## CELESTIAL-TNCLL Study Design



<sup>a</sup> Defined as CR or CR with incomplete recovery. <sup>b</sup> At <10<sup>4</sup> sensitivity at the first post-treatment follow-up based on next-generation sequencing by clonoSEQ® and flow cytometry. BM, bone [marrow]; CRR, complete [response] rate; DOR, duration of response; INV, assessed by investigator; IRC, assessed by independent review committee; PB, [peripheral] blood; R, randomized; TN, treatment naive; uMRD4, undetectable measurable residual disease.

# Approved Treatments in Frontline CLL: *Pros and Cons*

Ibrutinib	Acalabrutinib/Zanubrutinib	Venetoclax + Obinutuzumab (VO), Acala-Ven (AV), Acala-Ven-Obin (AVO)
<ul style="list-style-type: none"><li>• <b>Pro</b><ul style="list-style-type: none"><li>– Longest follow-up</li><li>– Median PFS 8.9 years from RESONATE-2 trial</li><li>– Once daily oral drug</li></ul></li><li>• <b>Con</b><ul style="list-style-type: none"><li>– Indefinite duration</li><li>– Low CR/uMRD</li><li>– Atrial fibrillation, bleeding</li></ul></li></ul>	<ul style="list-style-type: none"><li>• <b>Pro</b><ul style="list-style-type: none"><li>– Reduced off-target effects lead to improved safety vs. ibrutinib</li><li>– Zanubrutinib with superior efficacy vs. ibrutinib (in relapsed setting)</li></ul></li><li>• <b>Con</b><ul style="list-style-type: none"><li>– Shorter follow-up</li><li>– Indefinite duration</li><li>– Low CR/uMRD</li><li>– Atrial fibrillation, bleeding</li></ul></li></ul>	<ul style="list-style-type: none"><li>• <b>Pro</b><ul style="list-style-type: none"><li>– Time-limited</li><li>– High CR/uMRD (VO/AVO likely &gt; AV)</li></ul></li><li>• <b>Con</b><ul style="list-style-type: none"><li>– Shorter follow-up</li><li>– TLS logistics</li><li>– IV administration of obinutuzumab aside from AV</li><li>– Neutropenia, infection risk</li><li>– Shorter remissions in del(17p)/TP53-m with VO (not included in AMPLIFY trial)</li></ul></li></ul>

# Conclusions

- There are several effective first-line therapies in CLL
- Likely will not have a “one-size-fits-all” first-line regimen
- Shared decision making hugely important to select the best therapy for any given patient

# Agenda

**Module 1: Selection and Sequencing of Therapy for Relapsed/Refractory (RR) Chronic Lymphocytic Leukemia (CLL)**  
— Dr Wierda

**Module 2: First-Line Therapy for CLL — Dr Coombs**

**Module 3: Novel Agents and Strategies for RR CLL — Dr Wierda**

**Module 4: ASCO and EHA 2025**



# New Agents for Relapsed/Refractory CLL

- **Old targets:**

- BTK only degrader (bexobrutideg [NX-5948]; BGB-16673; ABBV-101)
- ncBTKi (nemtabrutinib; TT-01488; LP-168)
- ngBCL2i (lisaftoclax; sonrotoclax; ABBV-453)
- CD20xCD3 bispecifics (mosunetuzumab; epcoritamab; glofitamab; odronextamab)

- **New targets:**

- BCL-xL/BCL-2 – (LP-118)
- PKC $\beta$  inhibitor – (MS-553)
- MALT1 (ABBV-525)
- ROR1 (xCD3 bispecific; CAR-T cells)

# Epcoritamab in CLL: Deep Responses Across Subgroups

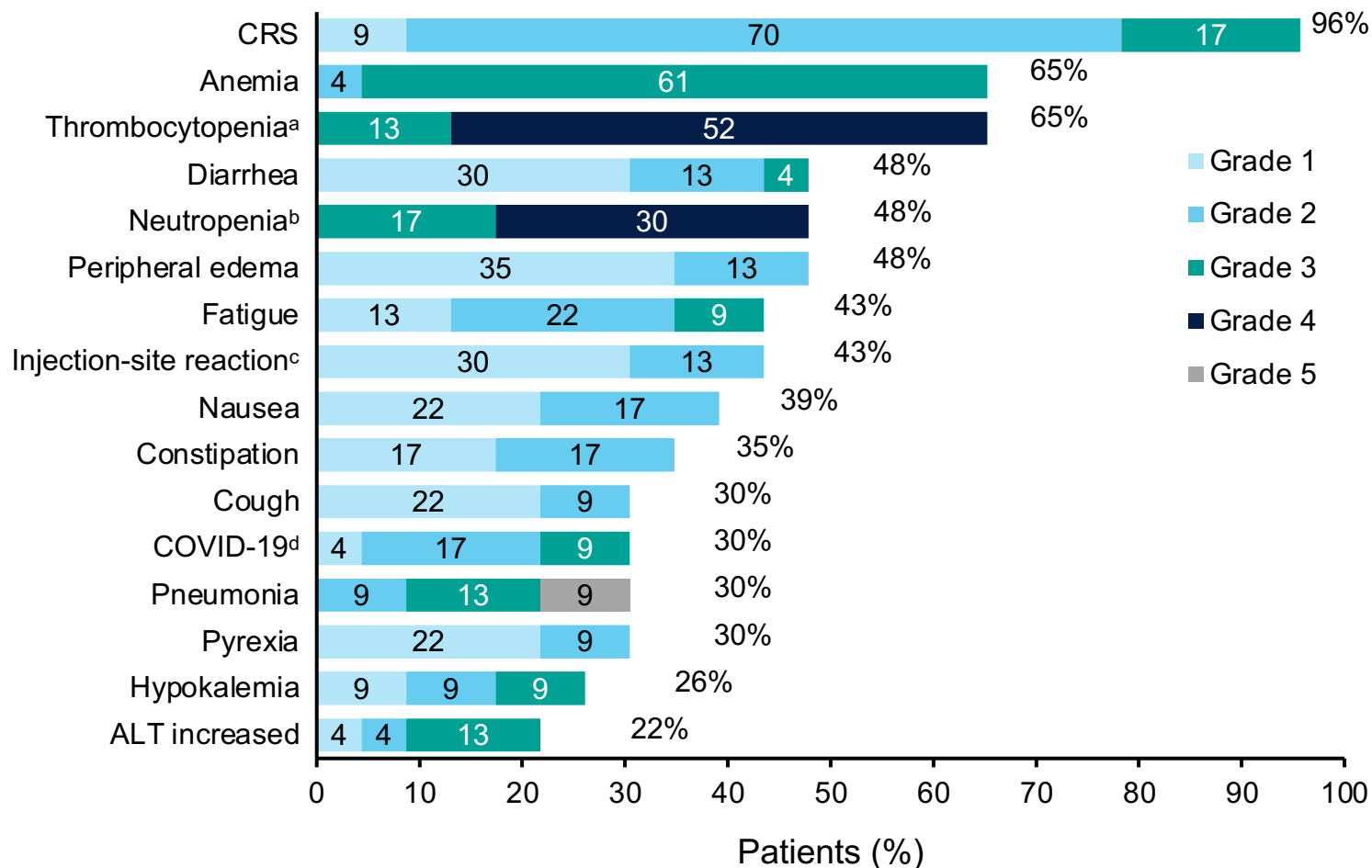
Response, n (%)	EXP mFU: 22.8 months					C1 OPT mFU: 2.9 months
	Full Analysis Set N=23	Response Evaluable n=21	TP53 Aberration n=15	IGHV Unmutated n=16	Double Exposed <sup>a</sup> n=19	Response Evaluable n=10
Overall response <sup>b</sup>	14 (61)	14 (67)	10 (67)	10 (63)	10 (53)	6 (60)
Complete response	9 (39)	9 (43)	5 (33)	7 (44)	7 (37)	1 (10)
Partial response	5 (22)	5 (24)	5 (33)	3 (19)	3 (16)	5 (50)
Stable disease	4 (17)	4 (19)	2 (13)	3 (19)	4 (21)	2 (20)
Progressive disease	1 (4)	1 (5)	1 (7)	0	1 (5)	1 (10)

<ul style="list-style-type: none"> <li>With limited follow-up, the C1 OPT regimen does not appear to affect epcoritamab efficacy</li> <li>uMRD4 in PBMCs was observed in most responders, including all patients with CR who were tested for MRD</li> </ul>	EXP MRD Negativity, n/n (%) <sup>c</sup>	uMRD4	uMRD6 <sup>d</sup>
	Overall response <sup>b</sup>	9/12 (75)	8/12 (67)
	Complete response	7/7 (100)	6/7 (86)
	Partial response	2/5 (40)	2/5 (40)
	Full analysis set	9/23 (39)	8/23 (35)

Four patients (*TP53* aberration, n=2; *IGHV* unmutated, n=3; double exposed, n=4) in EXP and 1 in C1 OPT shown above were not evaluable or had no assessment, including 3 in EXP (*TP53* aberration, n=2; *IGHV* unmutated, n=2; double exposed, n=3) and 1 in C1 OPT who died without postbaseline assessment. <sup>a</sup>Patients previously treated with both a BTK inhibitor and a BCL-2 inhibitor. <sup>b</sup>Response assessment according to iwCLL criteria. <sup>c</sup>Patients evaluated for MRD had at least 1 on-treatment MRD result and were not MRD negative at baseline. MRD was only evaluated in patients with CR or PR. <sup>d</sup>Two of 3 evaluated patients had uMRD6 in bone marrow at or shortly after the first CR assessment. mFU, median follow-up.

# Epcoritamab in CLL: Treatment-Emergent AEs (>20%) in EXP



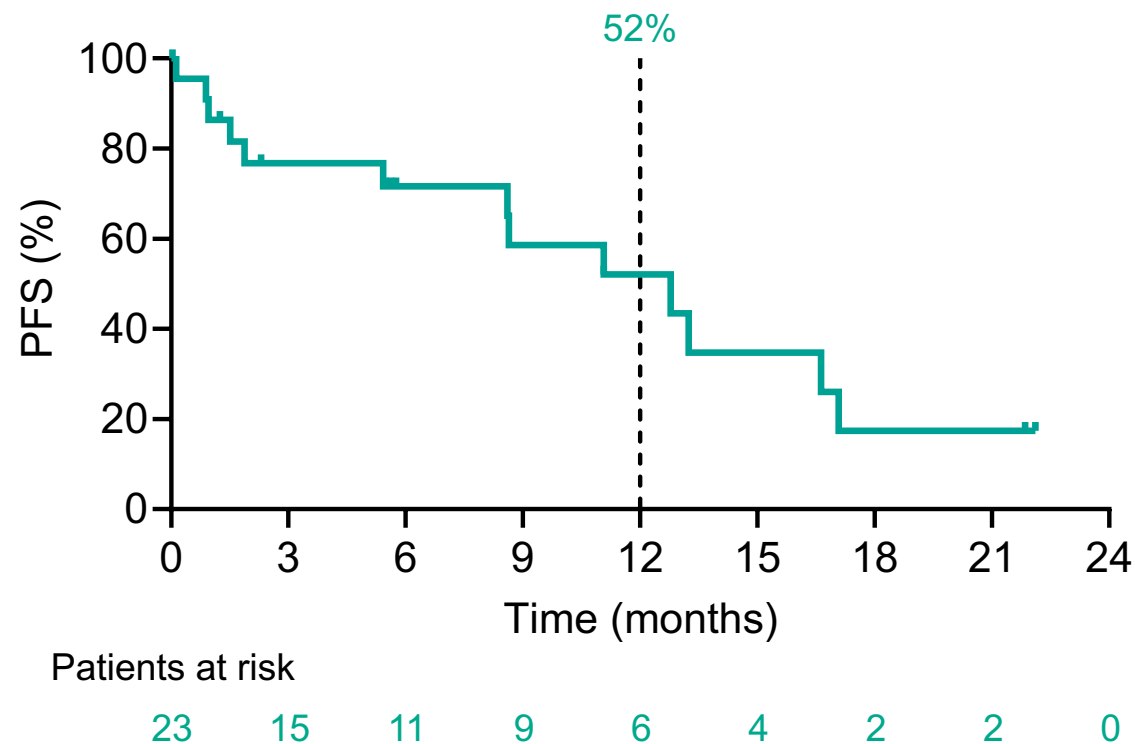
Patients With ≥1 Event, n (%)	EXP N=23
<b>Anemia</b>	15 (65)
At study entry	14 (61)
In first 8 weeks	15 (65)
<b>Thrombocytopenia</b>	15 (65)
At study entry	14 (61)
In first 8 weeks <sup>a</sup>	14 (61)
<b>Neutropenia</b>	11 (48)
At study entry	1 (4)
In first 8 weeks <sup>b</sup>	11 (48)

- TEAEs were primarily low grade (G1–2)
- TEAEs led to treatment discontinuation in 5 patients from EXP and 1 patient from C1 OPT
- 4 fatal TEAEs<sup>e</sup> occurred in EXP; none occurred in C1 OPT

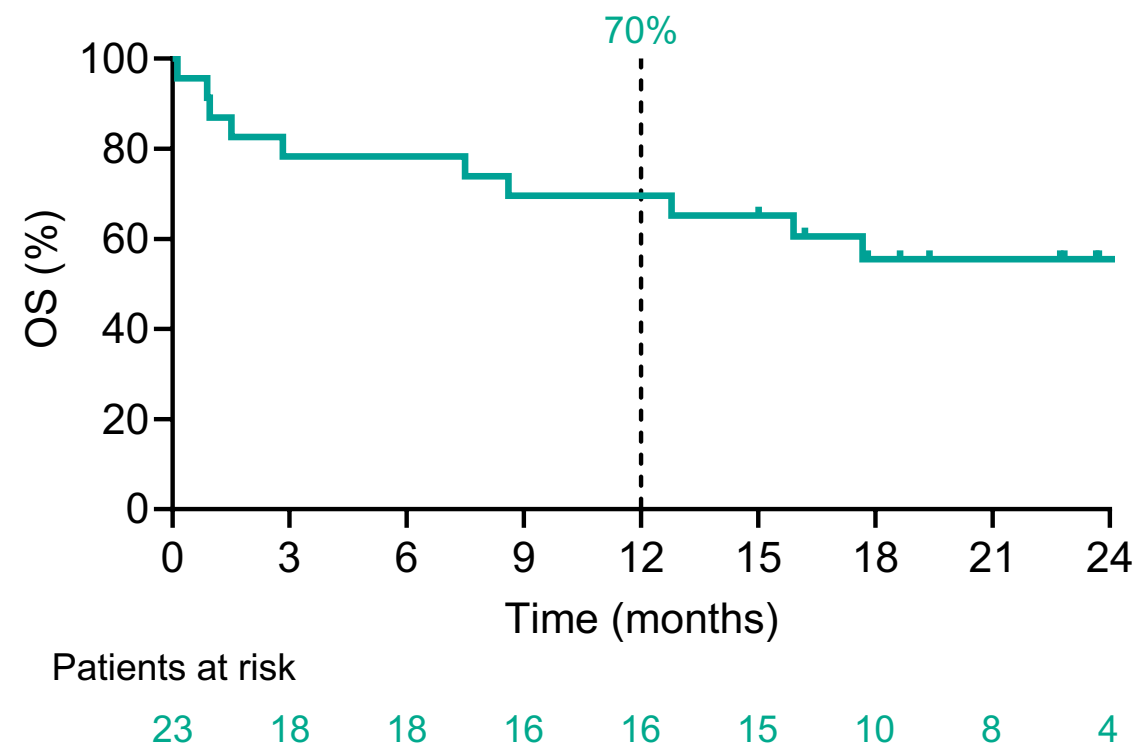
<sup>a</sup>Combined term includes thrombocytopenia and decreased platelet count. <sup>b</sup>Combined term includes neutropenia, decreased neutrophil count, and febrile neutropenia. Three patients had febrile neutropenia (EXP, n=2 [grades 1 and 3]; C1 OPT, n=1 [grade 3]). <sup>c</sup>Combined term includes injection-site reaction, bruising, erythema, rash, and swelling. <sup>d</sup>Combined term includes COVID-19 and COVID-19 pneumonia. <sup>e</sup>Fatal TEAEs were pneumonia (n=2), sepsis (n=1), and squamous cell carcinoma of the skin (n=1); 1 case of pneumonia was considered related to epcoritamab.

# Epcoritamab in CLL: Progression-Free and Overall Survival in EXP

## Progression-Free Survival



## Overall Survival

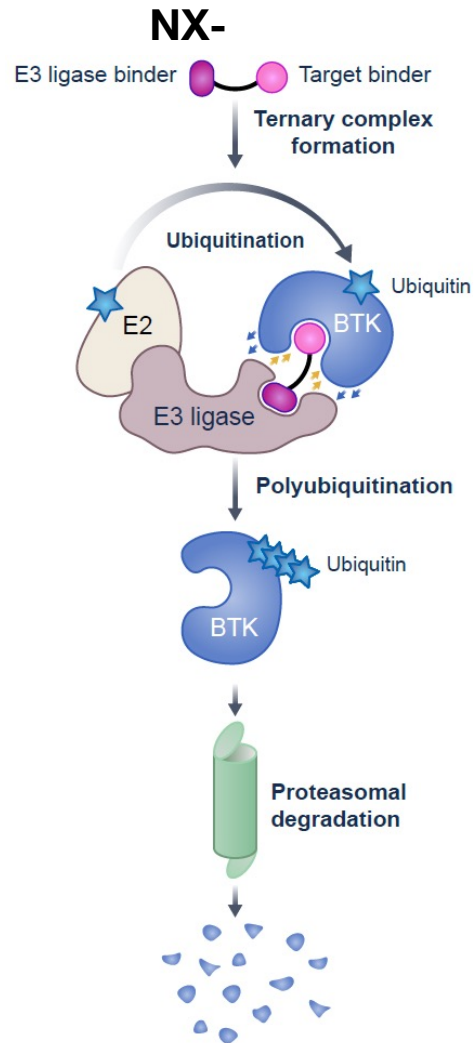


- Median PFS was 12.8 months (95% CI, 5.4–17.1); median OS was not reached (95% CI, 8.6 months–NR)

Kaplan–Meier estimates are shown.

# Background

## Novel BTK degrader NX-5948 addresses current unmet need in CLL treatment



**BCL2**, B-cell lymphoma 2; **BCL2i**, BCL2 inhibitor; **BTK**, Bruton's tyrosine kinase; **BTKi**, BTK inhibitor; **CLL**, chronic lymphocytic leukemia

- The current standard of care in CLL focuses on utilizing the inhibitors of two key signaling pathways – BTK and BCL2
- Unmet need still exists in the CLL treatment landscape:
  - Covalent and non-covalent BTKi resistance mutations<sup>1</sup> are found in more than half of patients who progress on BTKi therapies<sup>2</sup>
  - Some mutations in *BTK* can maintain intact B-cell receptor signaling through a scaffolding function of BTK<sup>3</sup>
  - The number of BCL2i refractory and double (BTKi/BCL2i) refractory patients is growing<sup>4</sup>
- Novel BTK degrader NX-5948 offers an additional treatment modality:
  - Can overcome treatment-emergent BTKi resistance mutations<sup>5</sup> and disrupt BTK scaffolding<sup>3,5</sup>

### References

1. Noviski et al. 20th Biennial International Workshop on CLL Meeting, Boston, MA. October 6–9, 2023
2. Molica et al. 66th ASH Annual Meeting, December 7–10, 2024
3. Montoya et al. Science 2024;383
4. Hayama and Riches. Onco Targets 2024;17
5. Linton K, et al. Oral presentation at European Hematology Association Hybrid Congress; 16 June 2024

# NX-5948-301 (Bexobrutideg): Safety Profile

TEAEs in  $\geq 10\%$  of overall population or Grade  $\geq 3$  TEAEs or SAEs in  $>1$  patient

TEAEs, n (%)	Patients with CLL/SLL (n=60)			Overall population (N=125)		
	Any grade	Grade $\geq 3$	SAEs	Any grade	Grade $\geq 3$	SAEs
Purpura/contusion <sup>a</sup>	22 (36.7)	–	–	42 (33.6)	–	–
Fatigue <sup>b</sup>	16 (26.7)	–	–	29 (23.2)	2 (1.6)	–
Petechiae	16 (26.7)	–	–	28 (22.4)	–	–
Thrombocytopenia <sup>c</sup>	10 (16.7)	1 (1.7)	–	26 (20.8)	7 (5.6)	–
Rash <sup>d</sup>	14 (23.3)	1 (1.7)	1 (1.7)	24 (19.2)	2 (1.6)	1 (0.8)
Neutropenia <sup>e</sup>	14 (23.3)	11 (18.3)	–	23 (18.4)	18 (14.4)	–
Anemia	11 (18.3)	4 (6.7)	–	21 (16.8)	10 (8.0)	–
Headache	10 (16.7)	–	–	21 (16.8)	1 (0.8)	1 (0.8)
COVID-19 <sup>f</sup>	10 (16.7)	–	–	19 (15.2)	2 (1.6)	2 (1.6)
Diarrhea	12 (20.0)	1 (1.7)	–	18 (14.4)	1 (0.8)	–
Cough	9 (15.0)	–	–	16 (12.8)	1 (0.8)	–
Pneumonia <sup>g</sup>	4 (6.7)	2 (3.3)	2 (3.3)	10 (8.0)	6 (4.8)	6 (4.8)
Lower respiratory tract infection	3 (5.0)	1 (1.7)	1 (1.7)	9 (7.2)	3 (2.4)	2 (1.6)
Fall	1 (1.7)	1 (1.7)	1 (1.7)	8 (6.4)	2 (1.6)	2 (1.6)
Hypertension	2 (3.3)	1 (1.7)	–	7 (5.6)	5 (4.0)	–
Hyponatremia	–	–	–	3 (2.4)	2 (1.6)	–
Pulmonary embolism	1 (1.7)	1 (1.7)	1 (1.7)	2 (1.6)	2 (1.6)	2 (1.6)
Subdural hematoma	1 (1.7)	–	1 (1.7)	2 (1.6)	1 (0.8)	2 (1.6)

- Tolerable safety profile consistent with prior disclosures
- 1 case of Grade 1 AFib in a CLL patient with pre-existing AFib
- 6 TEAEs resulted in drug discontinuation (1 CLL; 5 NHL)
- 2 Grade 5 AEs (1 pulmonary embolism; 1 case pending) deemed not related to NX-5948

<sup>a</sup>Purpura/contusion includes episodes of contusion or purpura; <sup>b</sup>Fatigue was transient; <sup>c</sup>Aggregate of 'thrombocytopenia' and 'platelet count decreased'; <sup>d</sup>Aggregate of 'rash' and 'rash maculopapular' and 'rash pustular';

<sup>e</sup>Aggregate of 'neutrophil count decreased' or 'neutropenia'; <sup>f</sup>Aggregate of 'COVID-19' and 'COVID-19 pneumonia'; <sup>g</sup>Aggregate of 'pneumonia' and 'pneumonia klebsiella'

AE, adverse event; AFib, atrial fibrillation; CLL, chronic lymphocytic leukemia; NHL, non-Hodgkin's lymphoma; SAE, serious adverse event; SLL, small lymphocytic lymphoma; TEAE, treatment emergent AE

Shah, et al., ASH 2024, Abstract #884

# NX-5948-301 (Bexobrutideg): Overall Response Assessment

Response rate deepens with longer time on treatment

CLL response-evaluable patients	Primary ORR analysis <sup>b</sup> ≥1 response assessment(s) at 8 weeks (n=49) <sup>c</sup>	Exploratory ORR analysis <sup>b</sup> ≥2 response assessments at 16 weeks (n=38) <sup>c</sup>
Objective response rate (ORR), <sup>a</sup> % (95% CI)	75.5 (61.1–86.7)	84.2 (68.7–94.0)
Best response, n (%)		
CR	0 (0.0)	0 (0.0)
PR	36 (73.5)	32 (84.2)
PR-L	1 (2.0)	0 (0.0)
SD	10 (20.4)	4 (10.5)
PD	2 (4.1)	2 (5.3)

<sup>a</sup>Objective response rate includes CR + PR + PR-L  
<sup>b</sup>Patients who progressed prior to their first response assessment and patients who discontinued for any reason after their first response assessment are included in the denominators  
<sup>c</sup>Patients without identified target lesion(s) at baseline are evaluated as disease-evaluable per iwCLL criteria, while they may not be represented in waterfall plot

# BGB-16673: Overall Response Rate

## Significant Responses, Particularly at 200 mg Dose Level

### CaDAnCe-101: R/R CLL/SLL

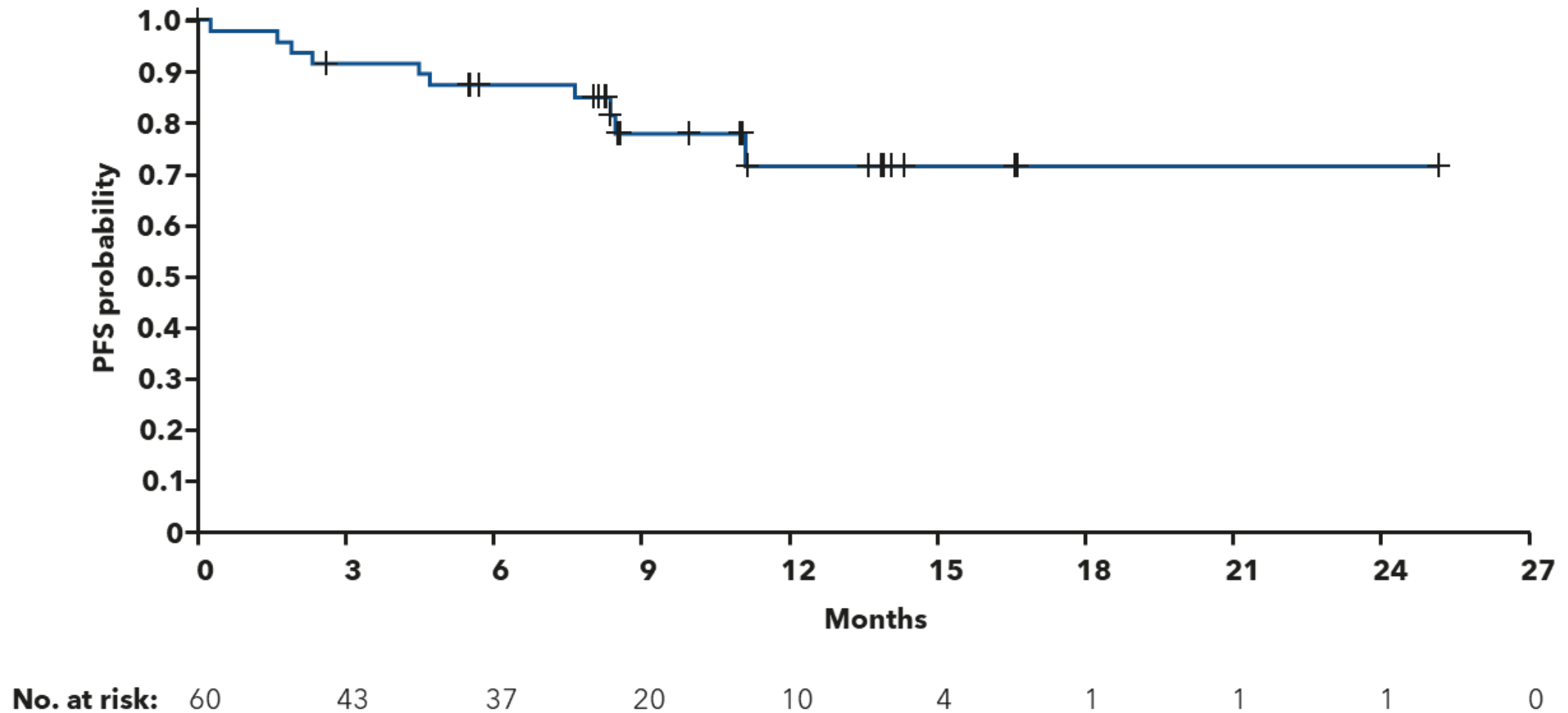
	50 mg (n=1)	100 mg (n=5)	200 mg (n=16)	350 mg (n=15)	500 mg (n=12)	Total <sup>a</sup> (N=49)
<b>Best overall response, n (%)</b>						
CR/CRI	0	1 (20.0)	1 (6.3)	0	0	<b>2 (4.1)</b>
PR <sup>b</sup>	1 (100)	3 (60.0)	12 (75.0)	10 (66.7)	7 (58.3)	33 (67.3)
PR-L	0	0	2 (12.5)	0	1 (8.3)	3 (6.1)
SD	0	1 (20.0)	0	1 (6.7)	4 (33.3)	6 (12.2)
PD	0	0	1 (6.3)	1 (6.7)	0	2 (4.1)
Discontinued prior to first assessment	0	0	0	3 (20.0)	0	3 (6.1)
<b>ORR, n (%)<sup>c</sup></b>	1 (100)	4 (80.0)	<b>15 (93.8)</b>	10 (66.7)	8 (66.7)	<b>38 (77.6)</b>
<b>Disease control rate, n (%)<sup>d</sup></b>	1 (100)	5 (100)	15 (93.8)	11 (73.3)	12 (100)	44 (89.8)
<b>Time to first response, median (range), months<sup>e</sup></b>	2.9 (2.9-2.9)	4.2 (2.8-6.2)	2.9 (2.6-8.3)	2.8 (2.6-8.3)	2.8 (2.6-8.3)	2.8 (2.6-8.3)
<b>Time to best response, median (range), months</b>	2.9 (2.9-2.9)	5.6 (2.8-11.1)	3.4 (2.6-13.8)	5.6 (2.6-8.3)	4.2 (2.6-8.6)	3.6 (2.6-13.8)
<b>Duration of exposure, median (range), months</b>	26.4 (26.4-26.4)	13.8 (13.6-18.6)	10.6 (2.9-18.9)	10.3 (0.2-16.8)	9.3 (6.8-15.4)	10.4 (0.2-26.4)

<sup>a</sup>Efficacy-evaluable population. <sup>b</sup>Out of 33 patients with PR, 8 achieved all nodes normalized. <sup>c</sup>Includes best overall response of PR-L or better. <sup>d</sup>Includes best overall response of SD or better. <sup>e</sup>In patients with a best overall response of PR-L or better. CR=complete response, CRI=complete response with incomplete marrow recovery, ORR=overall response rate, PD=progressive disease, PR=partial response, PR-L=partial response with lymphocytosis, SD=stable disease.



# BGB-16673: Progression-Free Survival

CaDAnCe-101: R/R CLL/SLL



Data cutoff: September 2, 2024.  
PFS=progression-free survival.

# Conclusions

- Treatment for relapsed disease directed by prior treatment, duration of last remission, and clinical resistance to targeted agent(s)
- Refractory disease remains unmet need – promising agents in development
  - Alternative targeted therapies
  - CD19-CAR T-cells
  - Bispecific antibodies

# Agenda

**Module 1: Selection and Sequencing of Therapy for Relapsed/Refractory (RR) Chronic Lymphocytic Leukemia (CLL) — Dr Wierda**

**Module 2: First-Line Therapy for CLL — Dr Coombs**

**Module 3: Novel Agents and Strategies for RR CLL — Dr Wierda**

**Module 4: ASCO and EHA 2025**

**SEQUOIA 5-year follow-up in arm C: Frontline zanubrutinib monotherapy in patients with del(17p) and treatment-naive chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL).**

Tam C et al.

ASCO 2025; Abstract 7011.

**RAPID ORAL ABSTRACT SESSION | SATURDAY, MAY 31 | 8:12 AM CT**

# Combination of zanubrutinib (zanu) + venetoclax (ven) for treatment-naïve (TN) CLL/SLL: Results in SEQUOIA arm D.

Shadman M et al.

ASCO 2025; Abstract 7009.

**RAPID ORAL ABSTRACT SESSION | SATURDAY, MAY 31 | 8:00 AM CT**

**Impact of venetoclax-based therapies on autoimmune cytopenias in patients with chronic lymphocytic leukemia: Final analysis of a multicenter study conducted by ERIC.**

Vitale C et al.

EHA 2025; Abstract S157

**Updated efficacy and safety of the bruton tyrosine kinase (BTK) degrader BGB-16673 In patients (Pts) with relapsed or refractory (R/R) CLL/SLL: Results from the ongoing phase (Ph) 1 CADANCE-101 study.**

Scarfò L et al.

EHA 2025; Abstract S158

**Updated results from the phase 1 study of sonrotoclax (BGB-11417), a novel BCL2 inhibitor, in combination with zanubrutinib for relapsed/refractory CLL/SLL demonstrate deep and durable responses.**

Cheah CY et al.

EHA 2025; Abstract S159

**EHA 2025 | ORAL PRESENTATION SESSION | SUNDAY, JUNE 15**

# **Data + Perspectives: Clinical Investigators Discuss the Current and Future Clinical Care of Patients with HER2-Positive Gastrointestinal Cancers**

*A CME Symposium Held in Conjunction with the 2025 ASCO® Annual Meeting*

**Sunday, June 1, 2025**

**7:00 PM – 8:30 PM CT (8:00 PM – 9:30 PM ET)**

## **Faculty**

**Haley Ellis, MD**

**Sara Lonardi, MD**

**Kanwal Raghav, MD, MBBS**

## **Moderator**

**Christopher Lieu, MD**

# **Cases from the Community: Investigators Discuss Available Research Guiding the Care of Patients with Ovarian and Endometrial Cancer**

*A CME Symposium Held in Conjunction with the 2025 ASCO® Annual Meeting*

**Sunday, June 1, 2025**

**7:00 PM – 9:00 PM CT (8:00 PM – 10:00 PM ET)**

## **Faculty**

**Joyce F Liu, MD, MPH**

**David M O'Malley, MD**

**Ritu Salani, MD, MBA**

**Alessandro D Santin, MD**

## **Moderator**

**Shannon N Westin, MD, MPH, FASCO, FACOG**



*Thank you for joining us!*

*Please take a moment to complete the survey currently up on Zoom. Your feedback is very important to us. The survey will remain open for 5 minutes after the meeting ends.*

*Information on how to obtain CME credit is provided in the Zoom chat room. Attendees will also receive an email in 1 to 3 business days with these instructions.*