

CORSO EDUCAZIONALE COMMISSIONE ANZIANI

XIII EDIZIONE

Giardini Naxos - Marriott Delta Hotels
17-18 aprile 2026



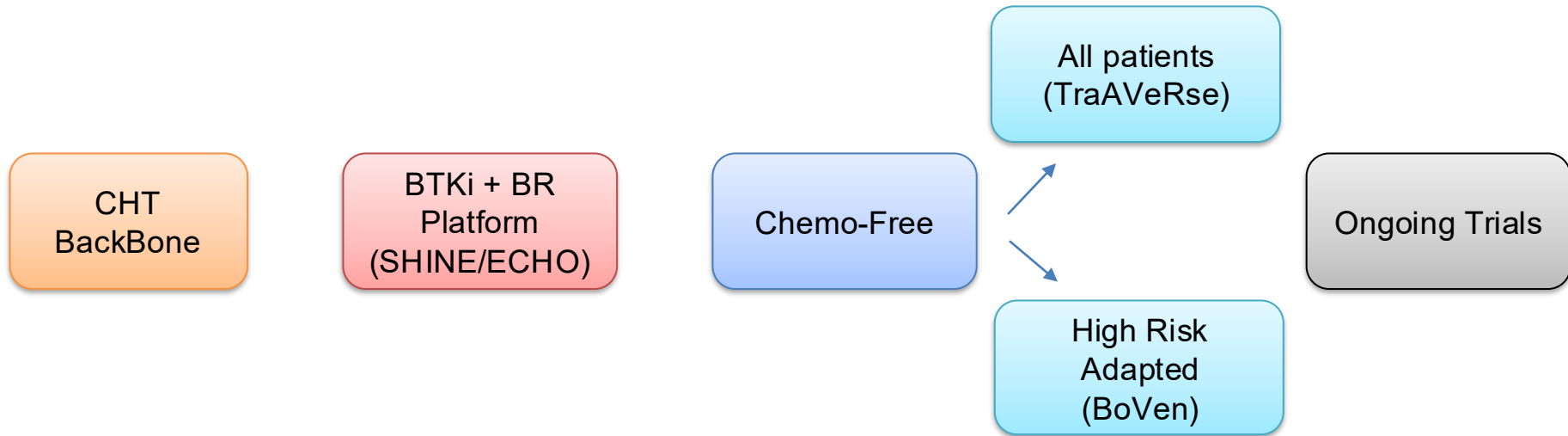
La terapia del linfoma mantellare nel paziente anziano nell'era dei BTKi in prima linea

Maria Chiara Tisi
UOC Ematologia Vicenza

Disclosures of Name Surname

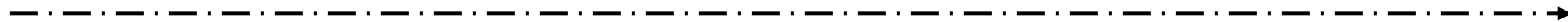
Company name	Research support	Employee	Consultant	Stockholder	Speakers bureau	Advisory board	Other
Gilead Science					X	X	
Novartis					X	X	
BMS					X	X	
Janssen					X		
Sobi					X	X	
AstraZeneca					X	X	
Lilly					X		
BeOne						X	
Roche					X	X	
Abbvie					X		

Outline



Outline

CHT
BackBone



BACKBONE: Induction strategies in the elderly population

StiL NHL and BRIGHT study

R-CHOP platform



R-Benda platform

Bendamustine improves survival^{1,2}

Add on with:

- Rituximab Maintenance³
- Lenalidomide⁴
- Bortezomib/Lenalidomide⁵
- **BTKi**
- Cytarabine⁶

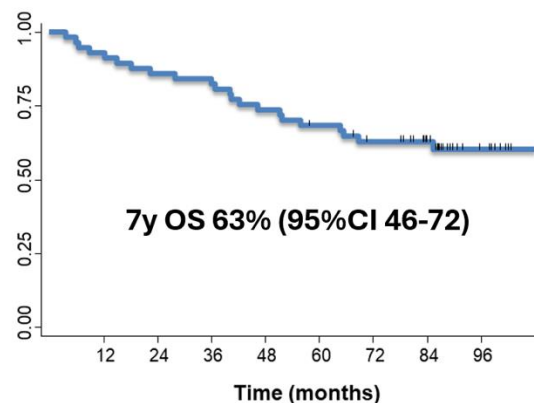
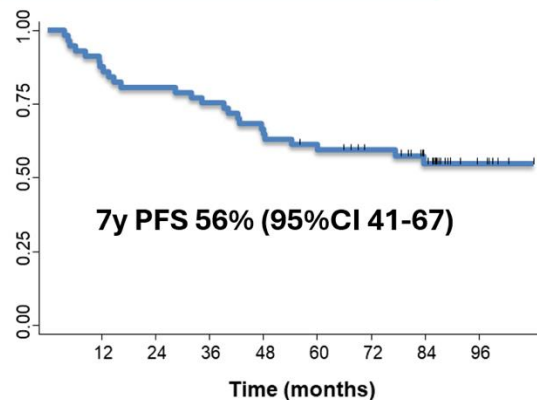
1. Rummel MJ et al, Lancet 2013; 2. Flinn et al, Blood 2014; 3. Rummel MJ et al, JCO 2016; 4. Ruan J et al, Blood 2016; 5. Smith M et al, Blood 2024; 6. Visco C, et al, Lancet Haematology 2017



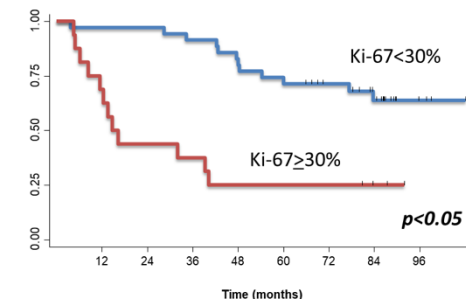
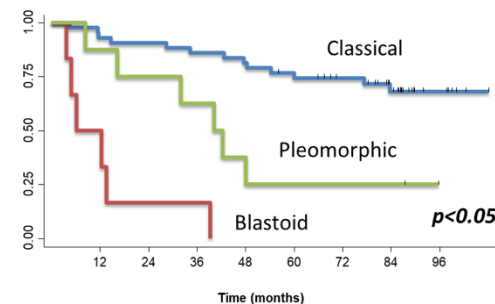
Results - LONG TERM FOLLOW-UP – 7Y FIL_RBAC500

Treatment	Day			
	1	2	3	4
Rituximab 375 mg/m ²	↓			
Bendamustine 70 mg/m ²		↓	↓	
Ara-C 500 mg/m ²		↓	↓	↓

Median follow-up 86 months (57-107)



Univariate analysis for PFS



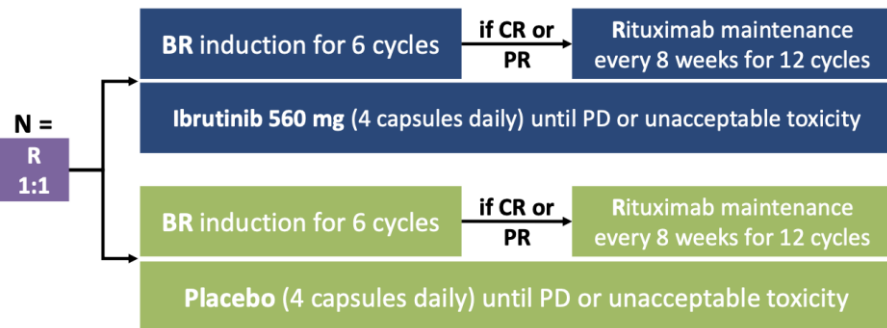
Outline

CHT
BackBone

BTKi + BR
Platform
(SHINE/ECHO)



SHINE: Ibrutinib + BR in untreated, elderly MCL patients



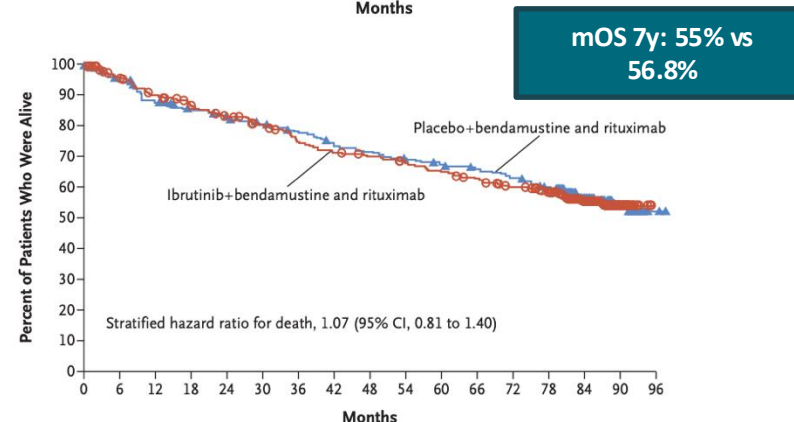
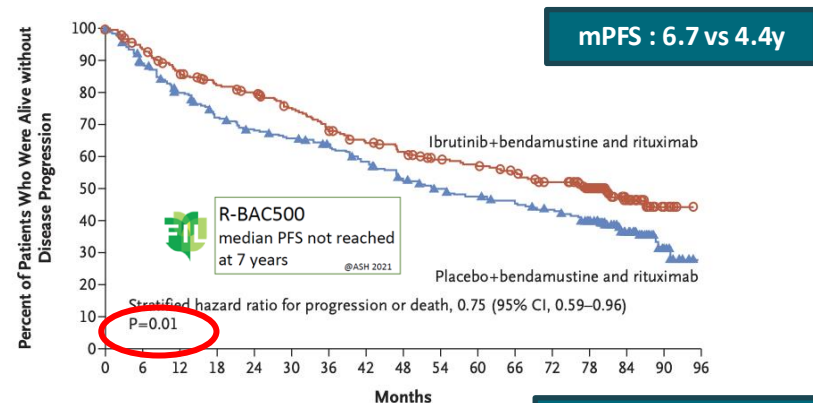
523 pts, median f-up 84.7 mo
Median age 71 (65-87) – 10% tp53 mut, 7% blastoid, 35% MIPI HR (I group)

Pts in CR: 65.5% I vs 57.6% P (p=0.01)

No clear advantage in high risk subgroups

Incidence of G3-4 AE: 81.5% I vs 77.3% P

“One hypothesis for further exploration could be the time-limited use of ibrutinib to retain efficacy but avoid ongoing toxic effects”



ECHO Study Design

ECHO (NCT02972840): multicenter, double-blind, placebo-controlled, phase 3 trial

Primary endpoint:

- PFS (independent review committee)

Key secondary endpoints:

- OS
- ORR (independent review committee)

Safety

Untreated MCL (N=598)

- Age ≥ 65 years
- ECOG PS ≤ 2

Stratification

- **sMIPI score:** Low vs intermediate vs high
- **Geographic region:** North America vs Western Europe vs other

Enrollment: April 2017 to March 2023
Sites: 195 globally

R
A
N
D
O
M
I
Z
E

1:1

Bendamustine^a
Rituximab^b
x 6 cycles

if $\geq$ PR

Maintenance Rituximab
(every 2 cycles x 2 years)

Acalabrutinib 100 mg BID, PO until PD or toxicity

Bendamustine^a
Rituximab^b
x 6 cycles

if $\geq$ PR

Maintenance Rituximab
(every 2 cycles x 2 years)

Placebo BID, PO until PD or toxicity

Crossover to
acalabrutinib after
PD was permitted

1 cycle = 28 days

Data cutoff date: February 15, 2024
Median time on study: 44.9 months

^aBendamustine 90 mg/m² on days 1 and 2

^bRituximab 375 mg/m² on day 1

High-risk disease defined as any of the following:

- High-risk MIPI (6–11)
- Ki-67 index $\geq 30\%$
- TP53 mutation
- Blastoid/pleomorphic histology

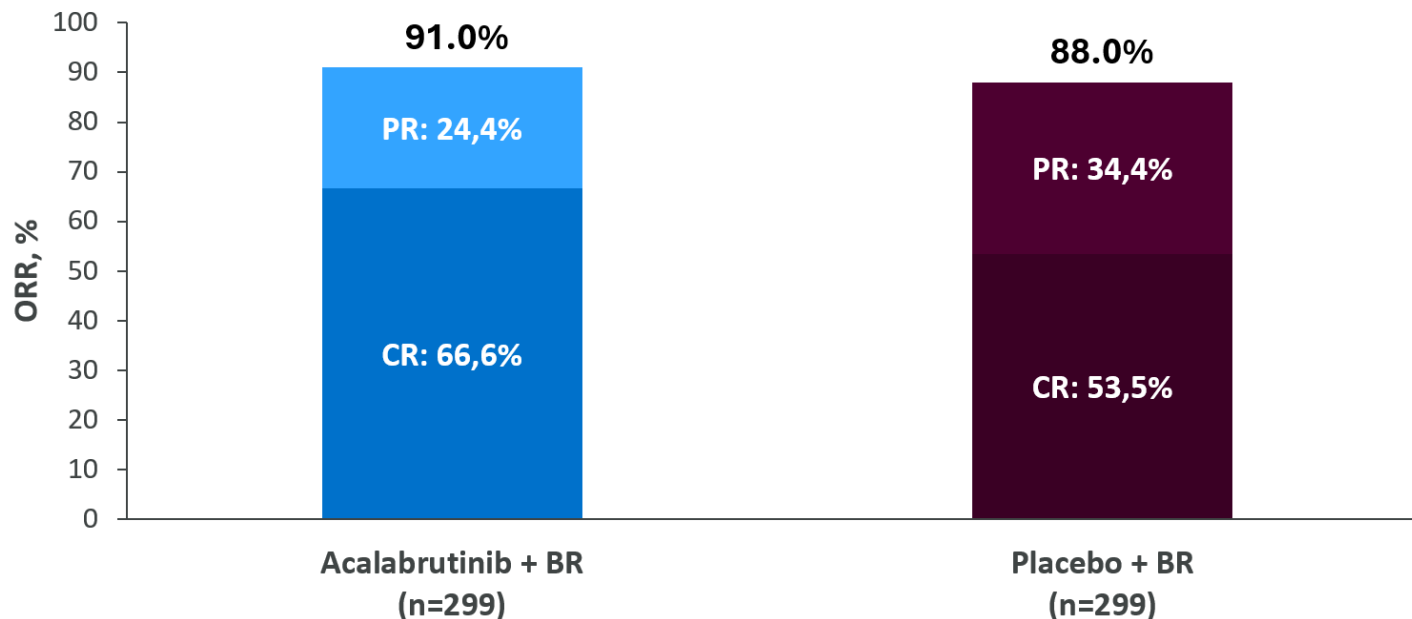
Demographic and baseline characteristics

	Acalabrutinib + BR (n=299)		Placebo + BR (n=299)
Age, median (range), y	71 (65–85)		71 (65–86)
≥75 y, n (%)	84 (28.1)		77 (25.8)
Male, n (%)	214 (71.6)		209 (69.9)
ECOG PS, n (%)			
1	129 (43.1)		132 (44.1)
2	12 (4.0)		23 (7.7)
Tumor bulk ≥5 cm, n (%)	112 (37.5)		113 (37.8)
Blastoid/pleomorphic histology, n (%)			38 (12.7)
Simplified MIPI score			
Low risk			101 (33.8)
Intermediate risk			25 (41.8)
High risk			73 (24.4)
Extranodal disease			77 (92.6)
TP53 status, n (%)			
Mutated			29 (9.7)
Unmutated			83 (27.8)
Ki-67, n (%)			
<30%			26 (42.1)
≥30%			47 (49.2)

Characteristic, % [n]	Acalabrutinib + BR (n = 299)	Placebo + BR (n = 299)
High-risk MIPI (6–11)	24.1 [72]	24.4 [73]
Ki-67 ≥30%	46.5 [139]	49.2 [147]
Ki-67 ≥50%	20.7 [62]	24.7 [74]
Blastoid/pleomorphic histology	13.7 [41]	12.7 [38]
TP53 mutation	7.4 [22]	9.7 [29]
TP53 status missing	60.2 [180]	62.5 [187]
Total high-risk	62.5 [187]	61.2 [183]

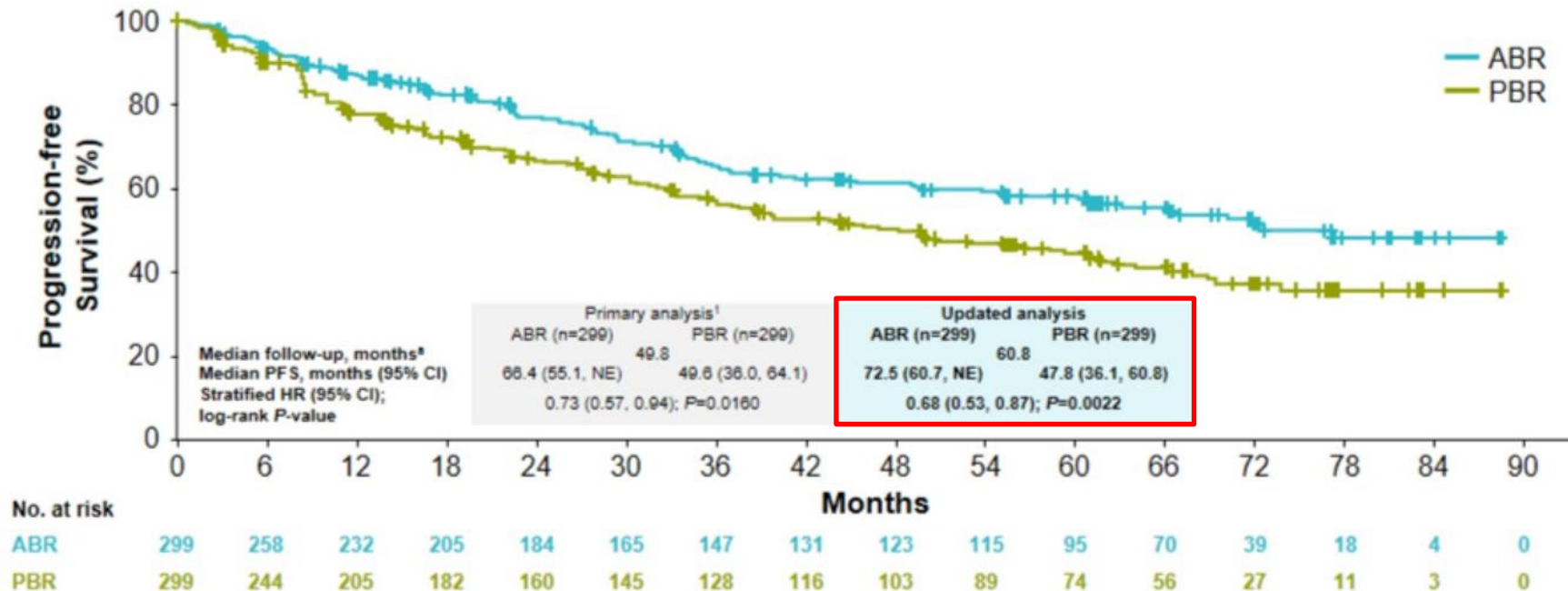
Best Overall Response and Complete Response Rates

- An additional 13% of patients achieved CR with acalabrutinib + BR



PFS further improved with ABR vs PBR

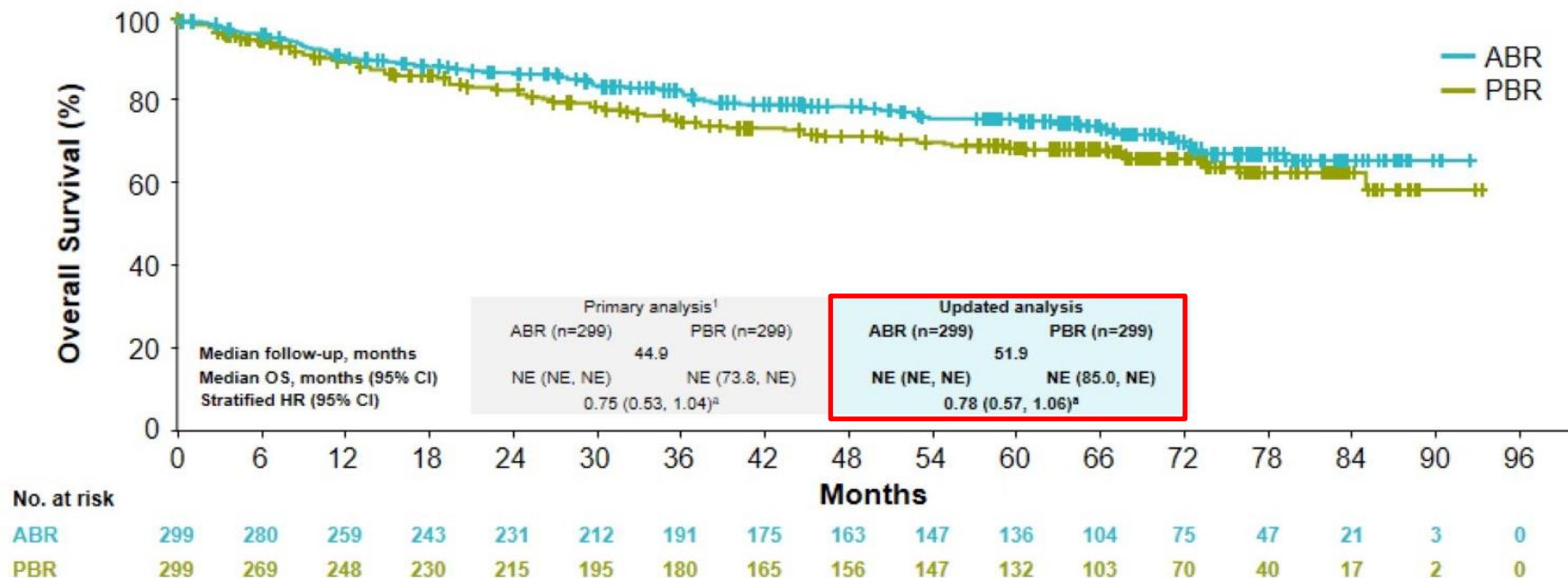
Median f-up
60.8 mo



- PFS risk reduction with ABR vs PBR increased from 27% (primary analysis) to 32% (updated analysis)
- Median PFS was longer with ABR vs PBR (6 years vs 4 years)

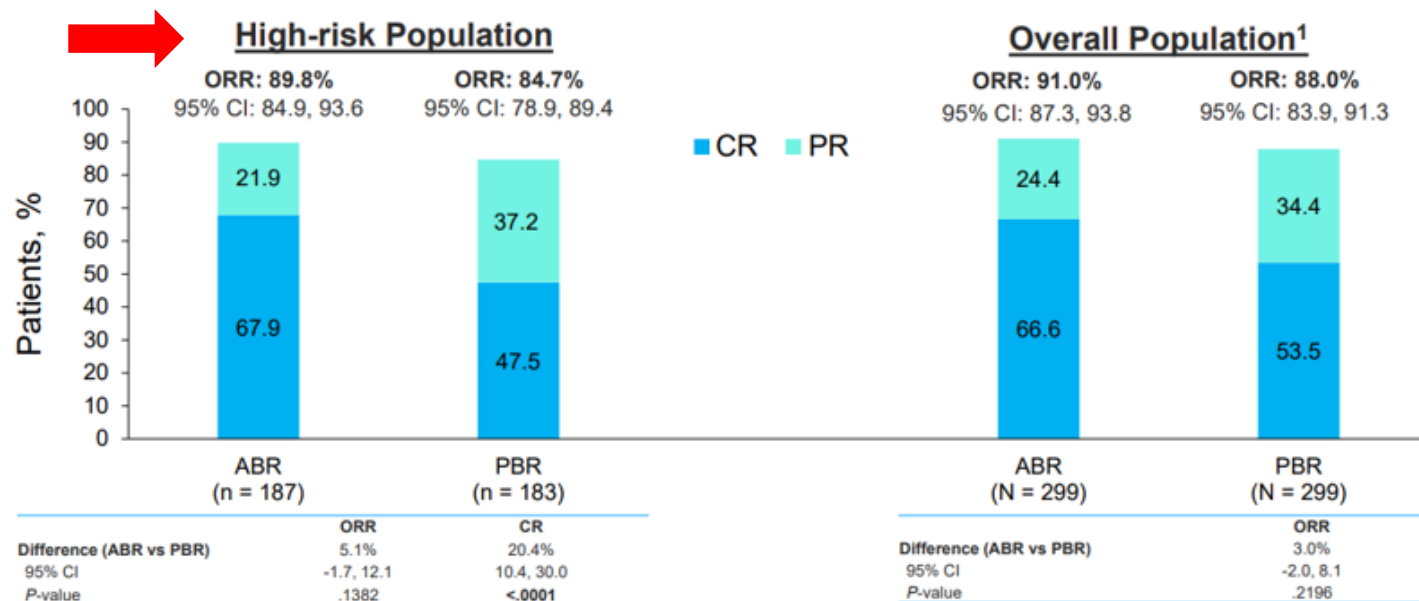
OS Analysis - Censoring for COVID-19 deaths

Median f-up
60.8 mo



Similar Trend as the Primary Analysis

ECHO – Response in patients with High-risk MCL

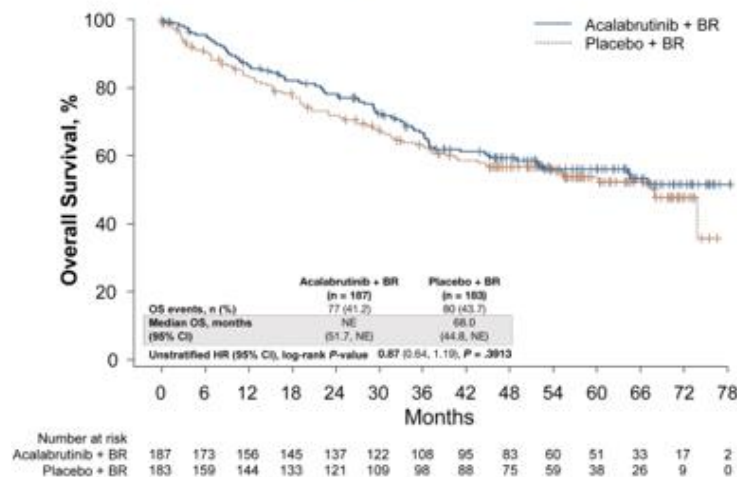


Best response of CR significantly higher with ABR in patients with high-risk MCL

ECHO – Survival in patients with High-risk MCL

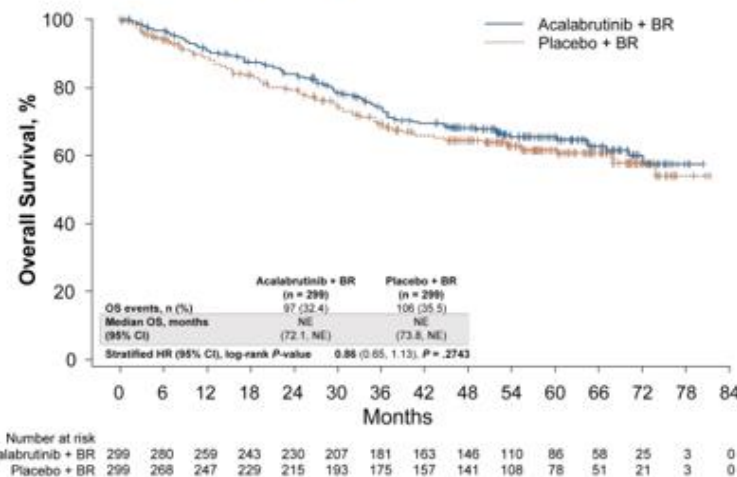


OS in High-risk Population (including crossover)



• OS maturity rate was 42%

OS in Full Analysis Population (including crossover)¹



The hazard ratio for OS comparing ABR with PBR was 0.87 (95% CI: 0.64, 1.19)

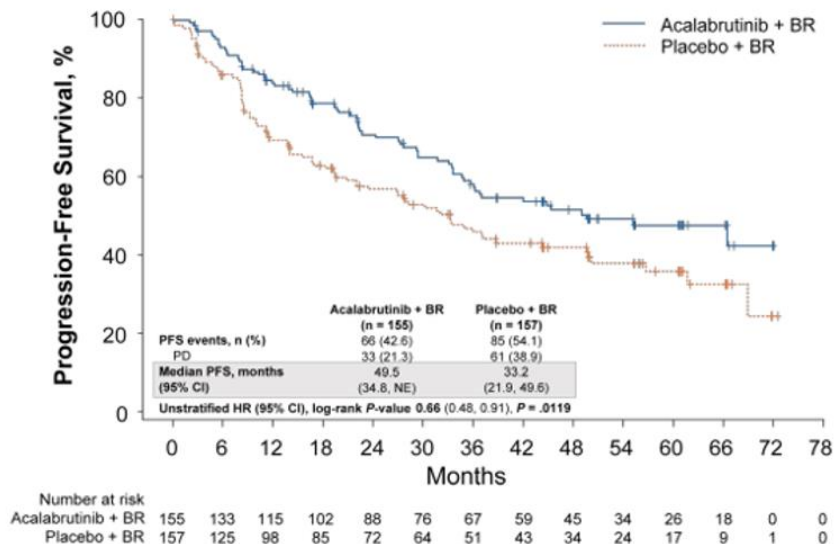
**CROSS-
OVER**

Censorizzando le morti per COVID - OS raggiunge un trend di superiorità (p=0.07)

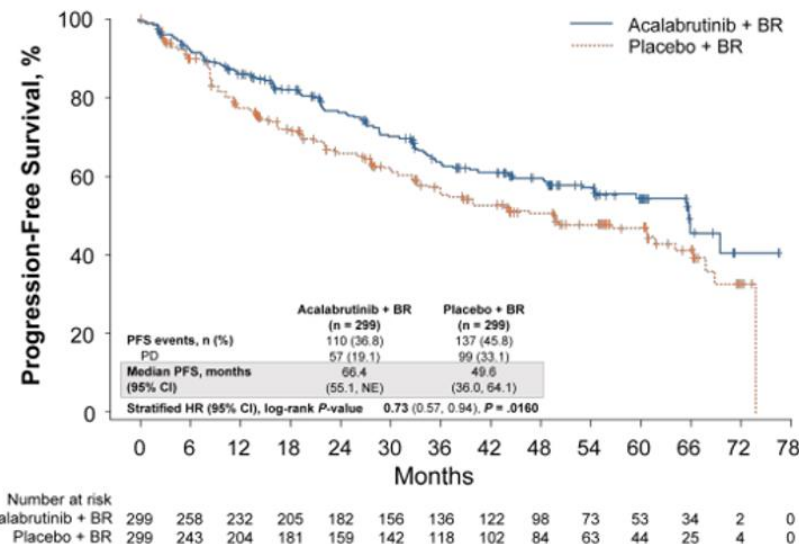
Wang M et al, JCO, 2025

ECHO – Longer PFS in patients with High-risk MCL

PFS in Patients With Ki-67 $\geq 30\%$, Blastoid/Pleomorphic Histology, and/or TP53 Mutation

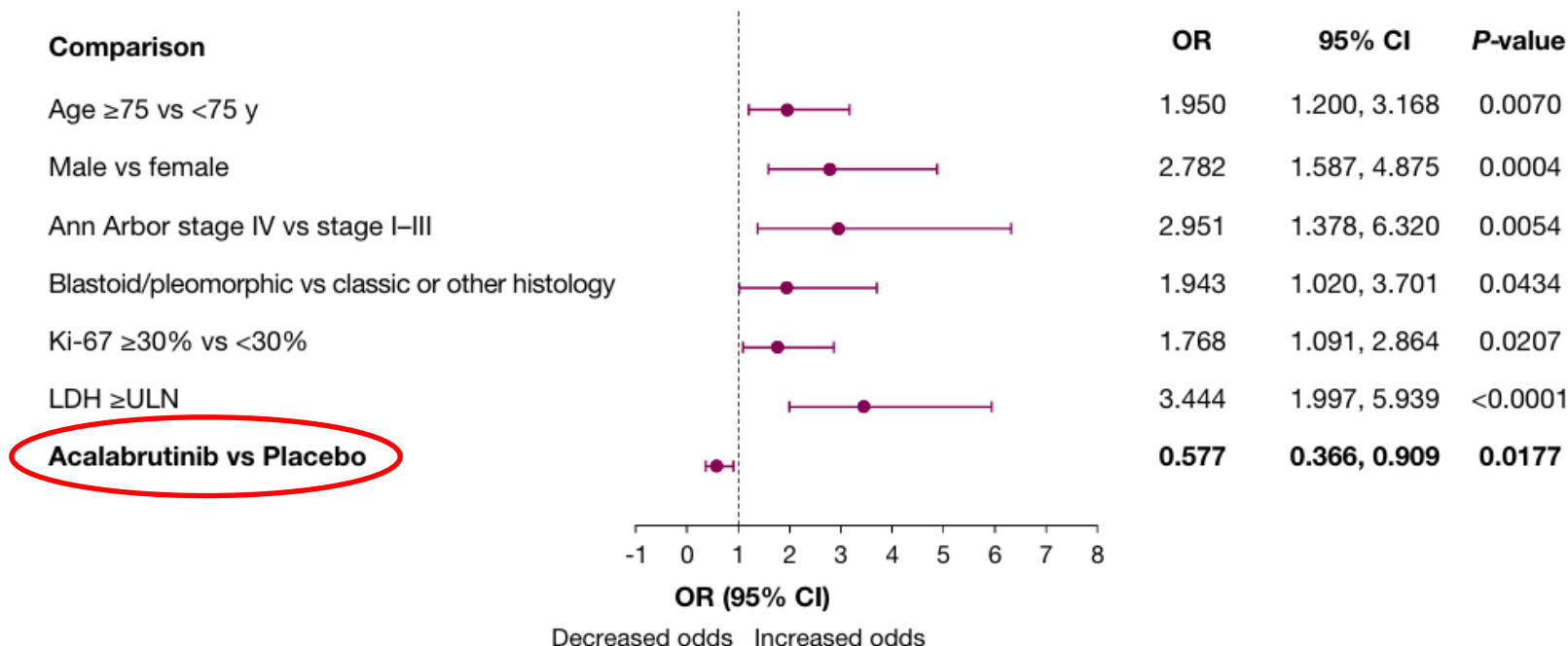


PFS in Full Analysis Population¹



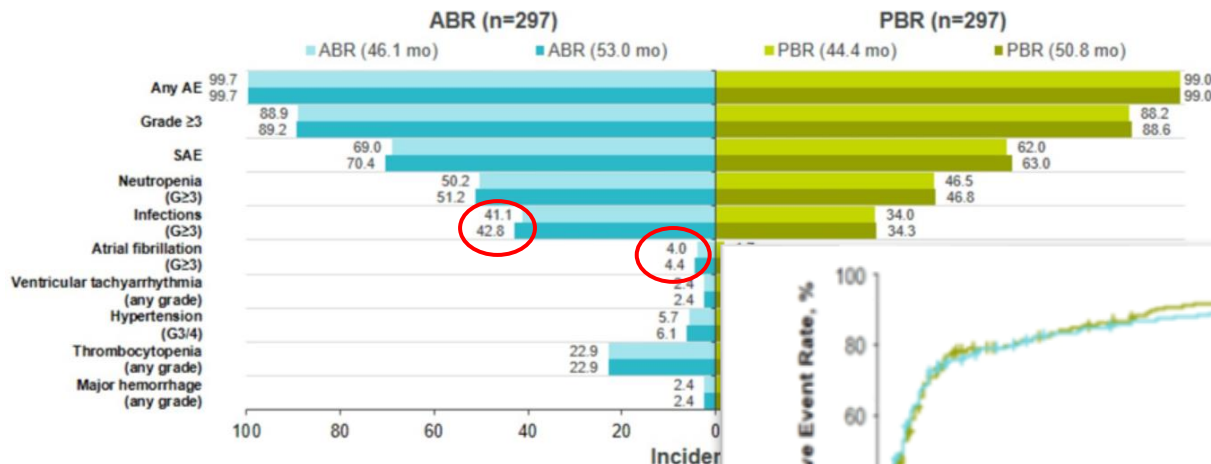
- This grouping removes MIPI, which was considered less important than biological factors in the phase 2 ALTAMIRA trial²
- When only patients with Ki-67 index $\geq 30\%$ and/or blastoid/pleomorphic histology were evaluated, PFS was longer with ABR vs PBR (HR 0.64; 95% CI 0.46, 0.90; P = .0092)

Factors impacting on POD24 Status

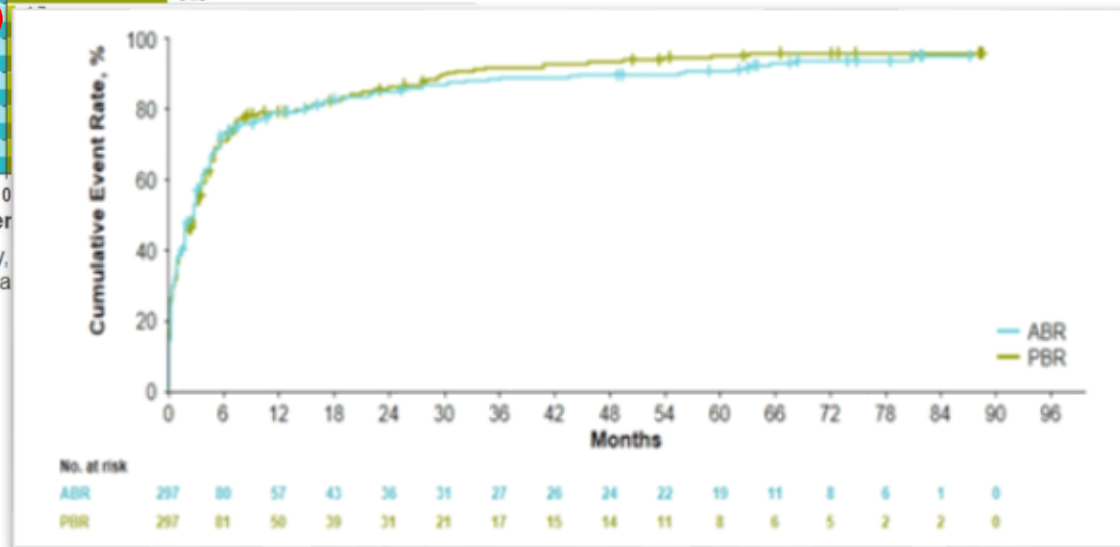


Il trattamento con ABR vs PBR **riduce significativamente il rischio di POD24**, dopo aggiustamento per i fattori correlati col rischio di progressione precoce

Cumulative Event Rate of Grade ≥ 3 Events



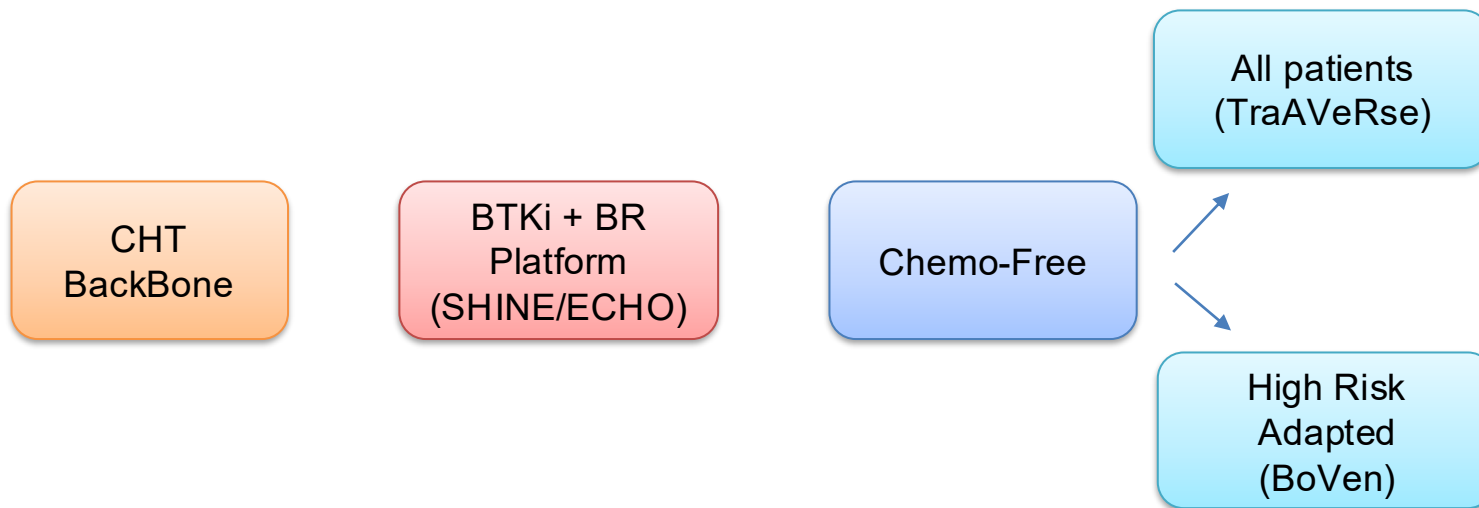
- ABR arm^a: 1 new case of grade ≥ 3 atrial fibrillation reported (primary,
- PBR arm^a: 1 new case of ventricular tachyarrhythmia reported (prima



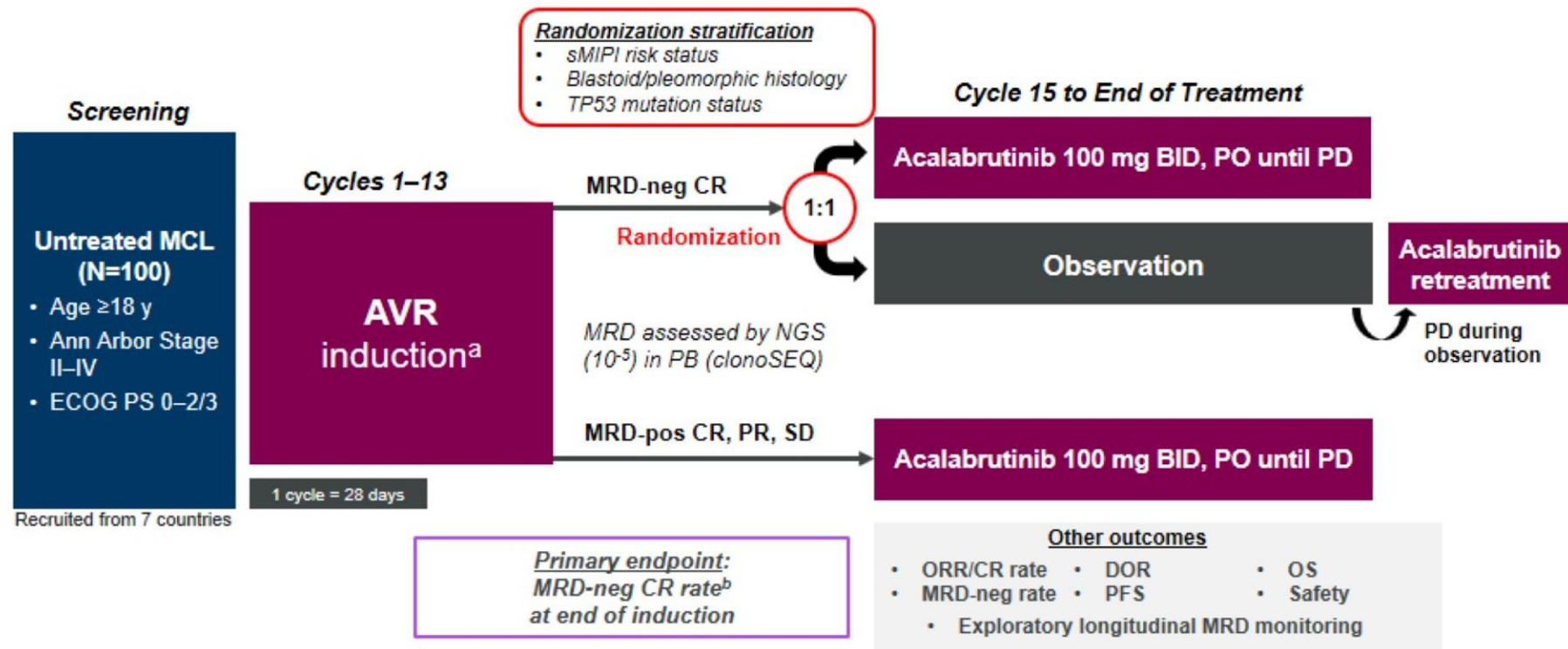
Comparable between arms

Wang M et al, JCO, 2025

Outline



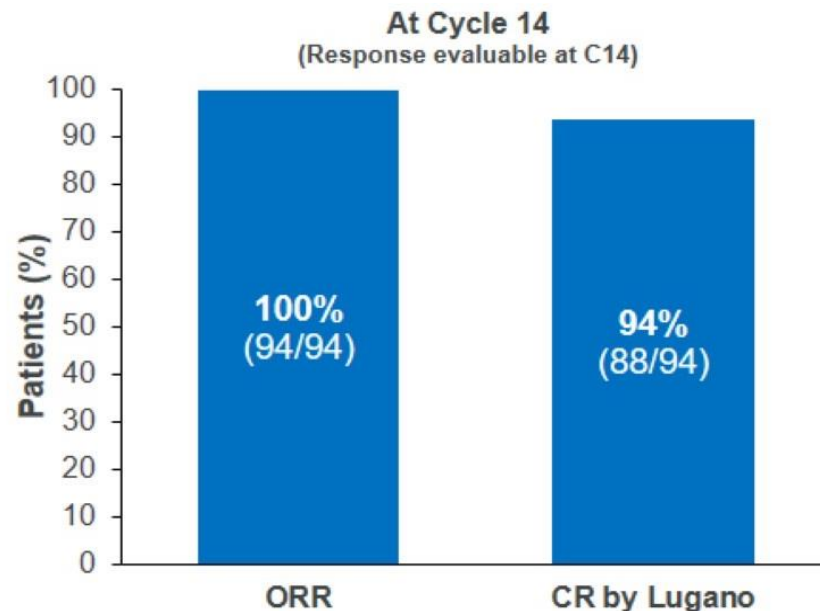
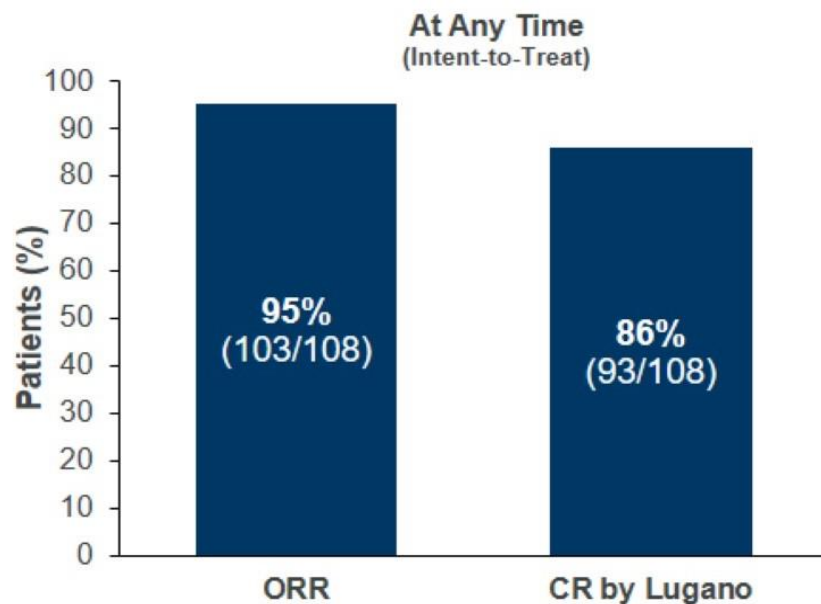
TrAVeRse Study Design: Multicenter, Open-label, Phase 2 Trial



AVR: Acalabrutinib, Venetoclax, Rituximab

Median Age 69 (40-89); < 65y: 38.9%

TrAVeRse: Response and Survival



Median f-up 14.8 mo

12mo PFS: 95.2% (tp53 mut 88.2%)

12mo DOR: 97% (tp53 mut 93,3%)

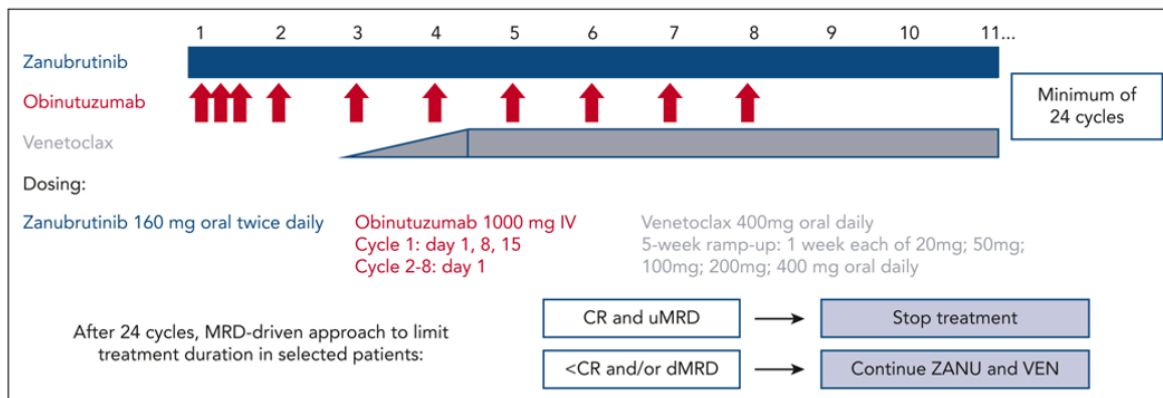
BOVen Study Design: Multicenter, Open-label, Phase 2 Trial

CLINICAL TRIALS AND OBSERVATIONS | JANUARY 30, 2025

Zanubrutinib, obinutuzumab, and venetoclax for first-line treatment of mantle cell lymphoma with a *TP53* mutation

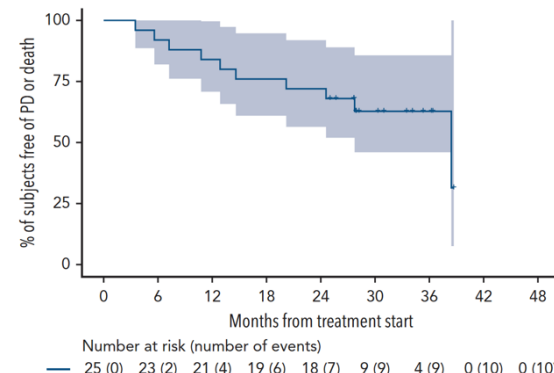
Clinical Trials & Observations

Anita Kumar, Jacob Soumerai, Jeremy S. Abramson, Jeffrey A. Barnes, Philip Caron, Shalini Chhabra, Maria Chabowska, Ahmet Dogan, Lorenzo Falchi, Clare Grieve, J. Erika Haydu, Patrick Connor Johnson, Ashlee Joseph, Hailey E. Kelly, Alyssa Labarre, Jennifer Kimberly Lue, Rosalba Martignetti, Joanna Mi, Alison Moskowitz, Colette Owens, Sean Plummer, Madeline Puccio, Gilles Salles, Venkatraman Seshan, Elizabeth Simkins, Natalie Slupe, Honglei Zhang, Andrew D. Zelenetz



25 *tp53* mut pts
 Median age 68 y (29-82)
 Best ORR 94% (24/25) – CR 88%

Median follow-up of 28.2 months

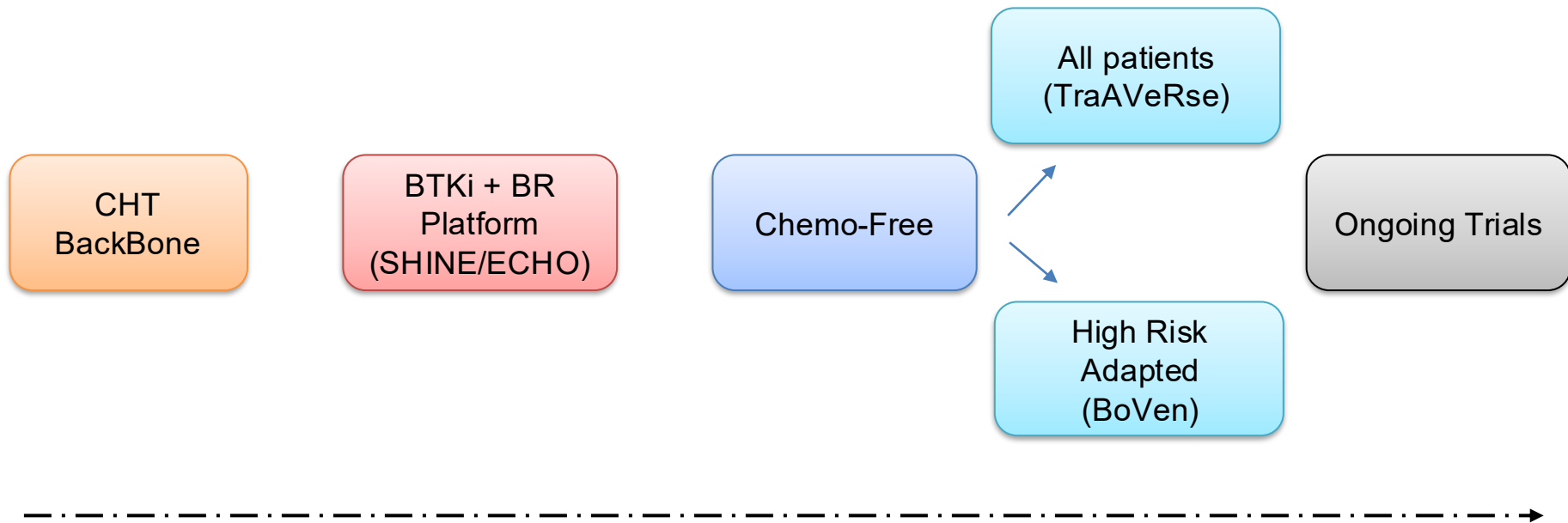


2y PFS 72%
 2y OS 76%

**Tailored
treatment**

Common Aes low grade (included diarrhea – 64%,
 neutropenia – 32%, infusion-related reactions - 24%)

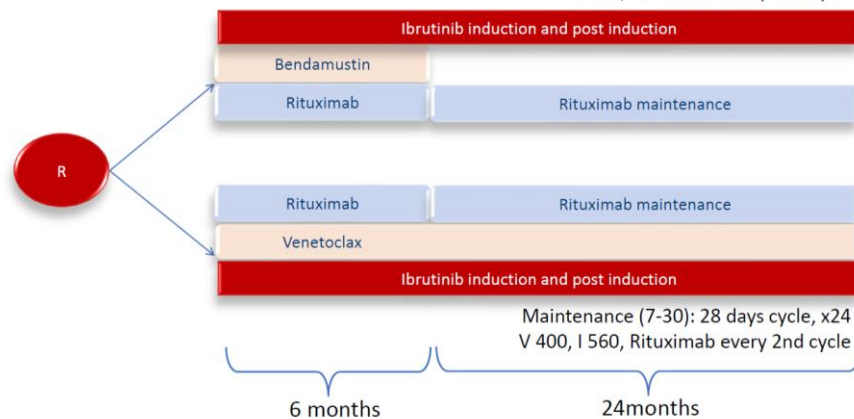
Outline



Ongoing Trials

VIRAL – Phase II randomized

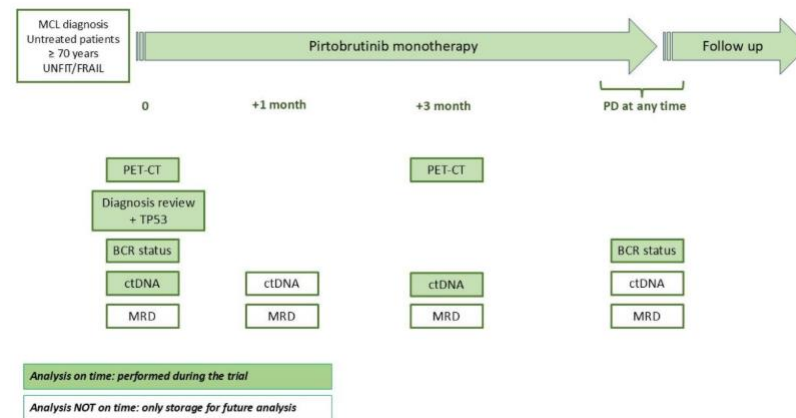
Maintenance (7-30): 28 days cycle, x24
I 560, Rituximab every 2nd cycle



Recruiting: 123/150 pts



PUMA Study



STARTING



Conclusions – Take home messages

- BR+Acalabrutinib soon available and standard option for patients not eligible to ASCT (≥ 65 ?), with interesting results in **high risk MCL**
- Chemo-free triplets (ZVO and AVR) are highly active, with early and sustained benefit, overall metabolic response rate consistently $>90\%$, no additive toxicity observed, **discontinuation** possible?
- Comparable benefit was seen in *TP53* mutated patients, though numbers still small, and longer follow-up is needed
- Open questions for BTK RR

