

Comprehensive Cancer Center
Tübingen-Stuttgart

Post ASH 2023 San Diego

Maligne Lymphome / CLL

Stefan Wirths

31. Januar 2024

Welcome to the
64th ASH[®]
Annual Meeting
and Exposition
#ASH22

EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN



Comprehensive
Cancer Center
Tübingen - Stuttgart



Universitätsklinikum
Tübingen

Klassisches Hodgkin-Lymphom

#3057

Comprehensive Analysis of TRM and PFS in the GHSG Phase III HD21 trial

BrECADD

Brentuximab

Etoposid

Cyclophosphamid

Doxorubicin

Dacarbacin

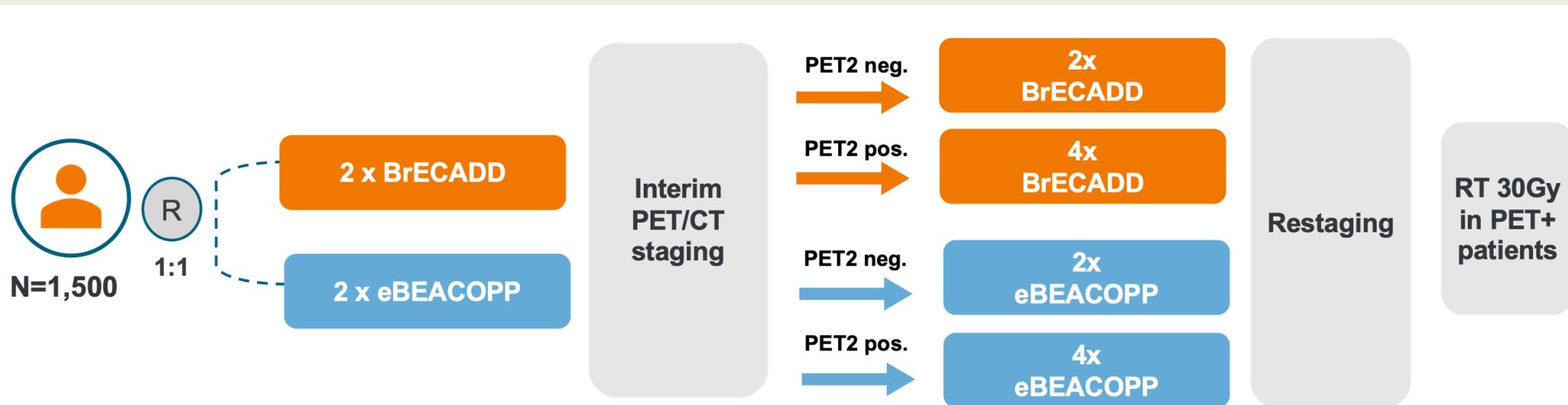
Dexamethason

~~Bleomycin~~

~~Vincristin~~

~~Procarbacin~~

~~Prednisolon~~



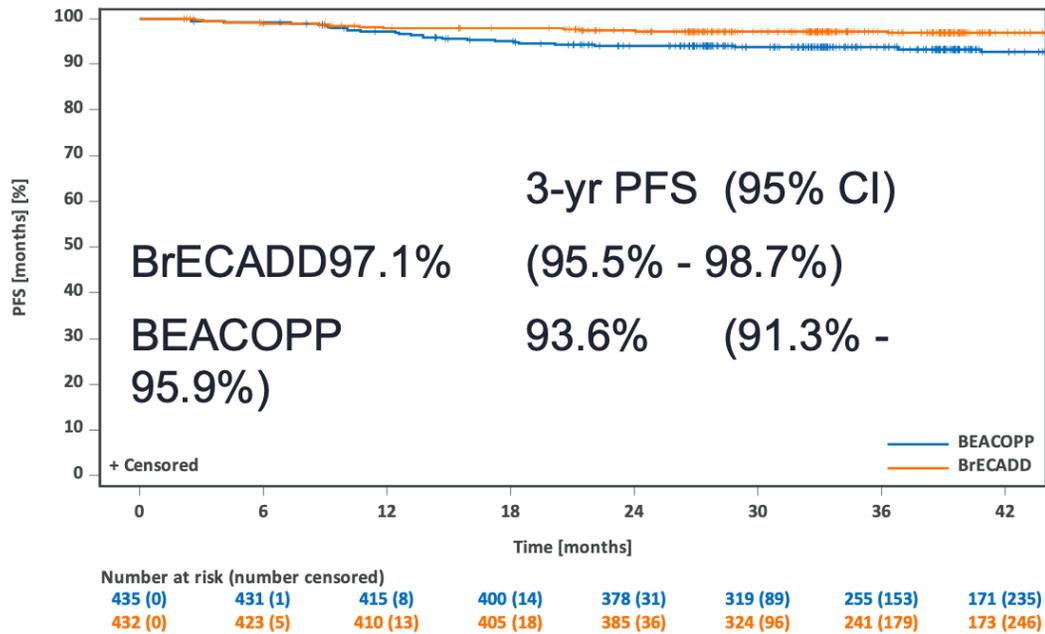
Co-primary objectives achieved:

1. Reduced treatment-related morbidity (TRMB) with BrECADD highly significant.
2. Non-inferiority of 4-6 x BrECADD in terms of PFS already at interim analysis shown

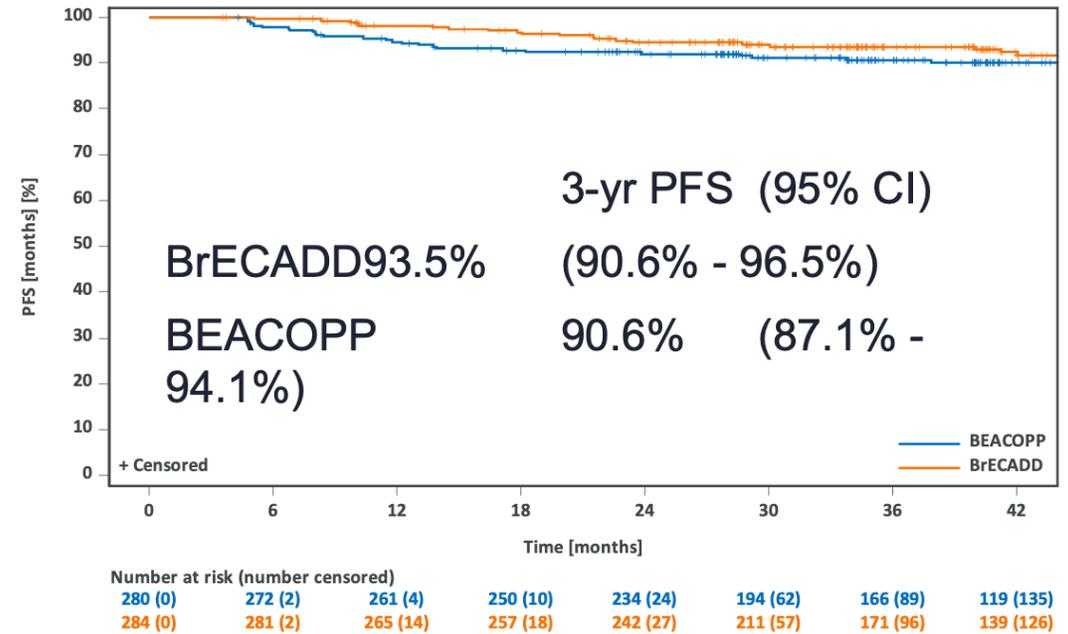
#3057

HD21: 3y progression-free survival and PET2-status by treatment arm

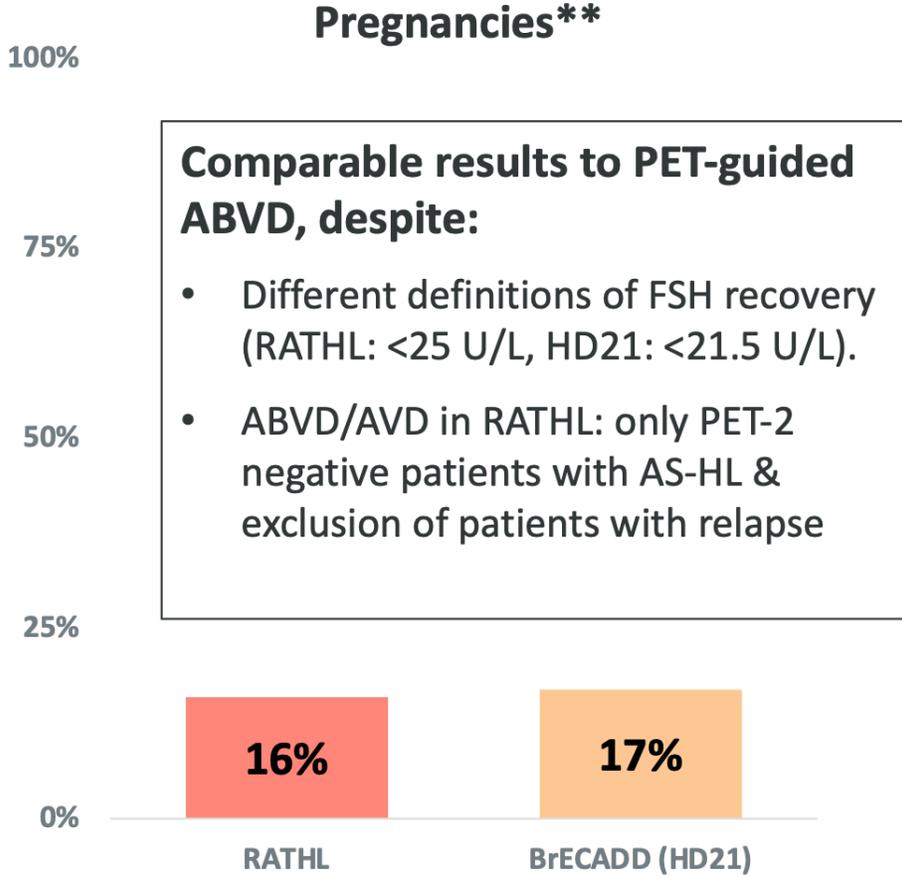
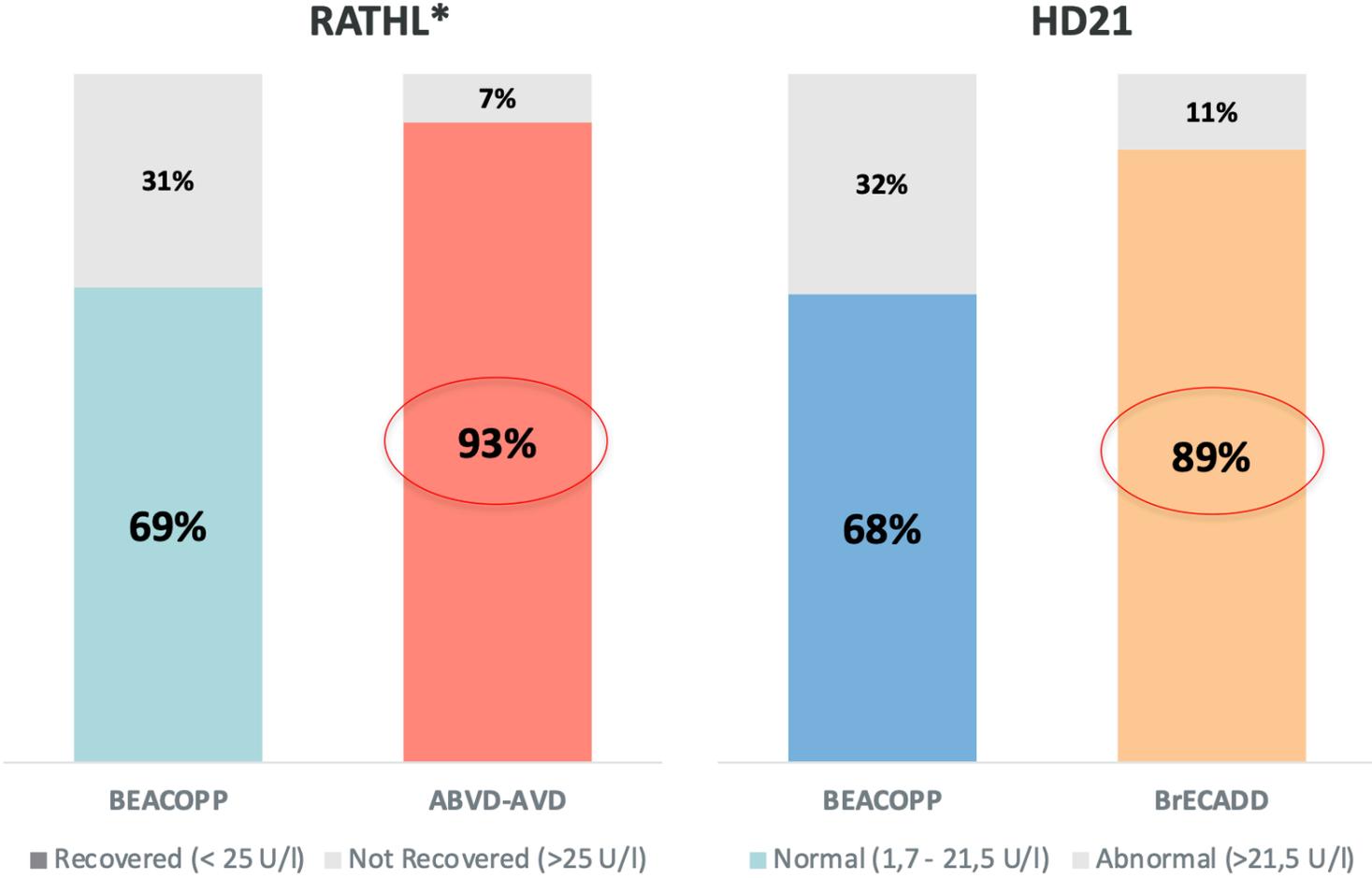
PET2-negative (4 cycles)



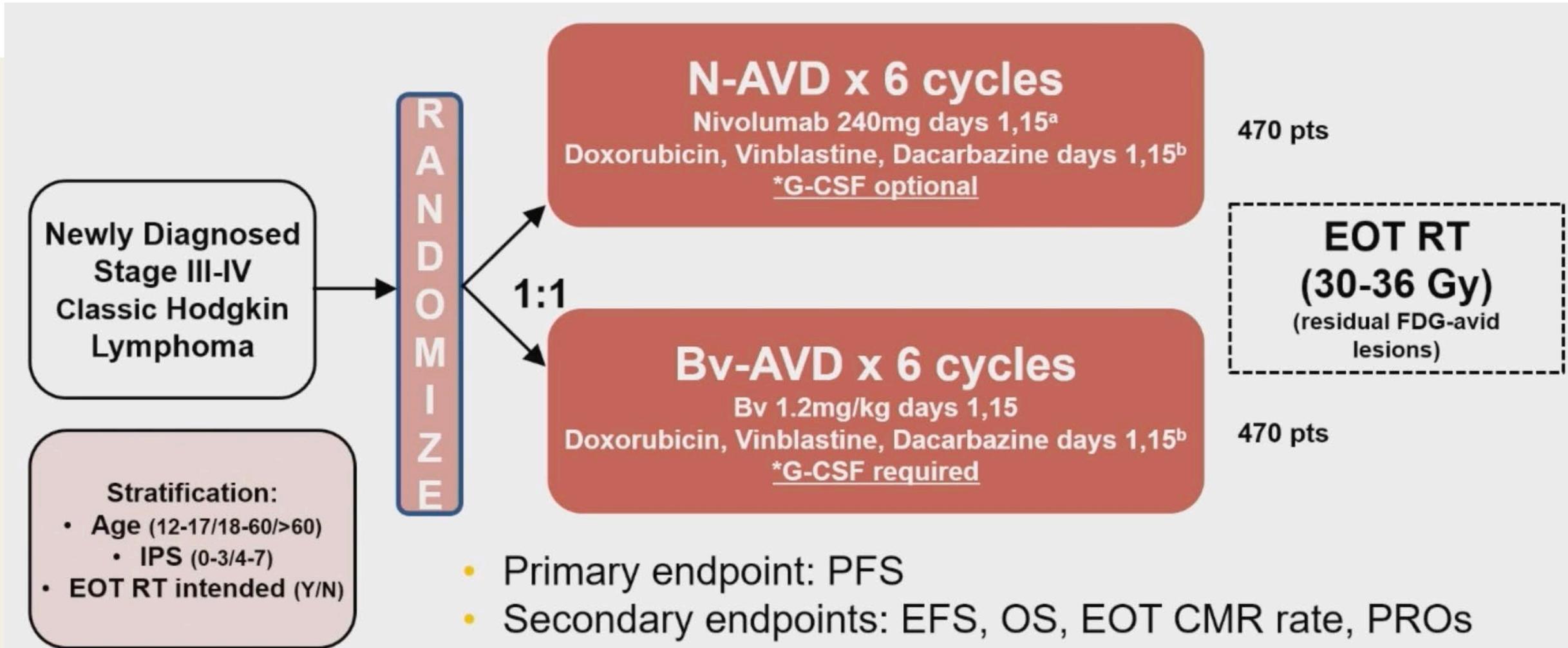
PET2-positive (6 cycles)



#4437: Pregnancies and Childbirth Following Advanced-Stage HL Treatment with BrECADD or BEACOPP in the Randomized Phase III GHSG HD21 Trial



#181: Nivolumab-AVD versus Bv-AVD in Older Patients (Aged > 60 Years) with Advanced Stage Hodgkin Lymphoma - SWOG S1826.

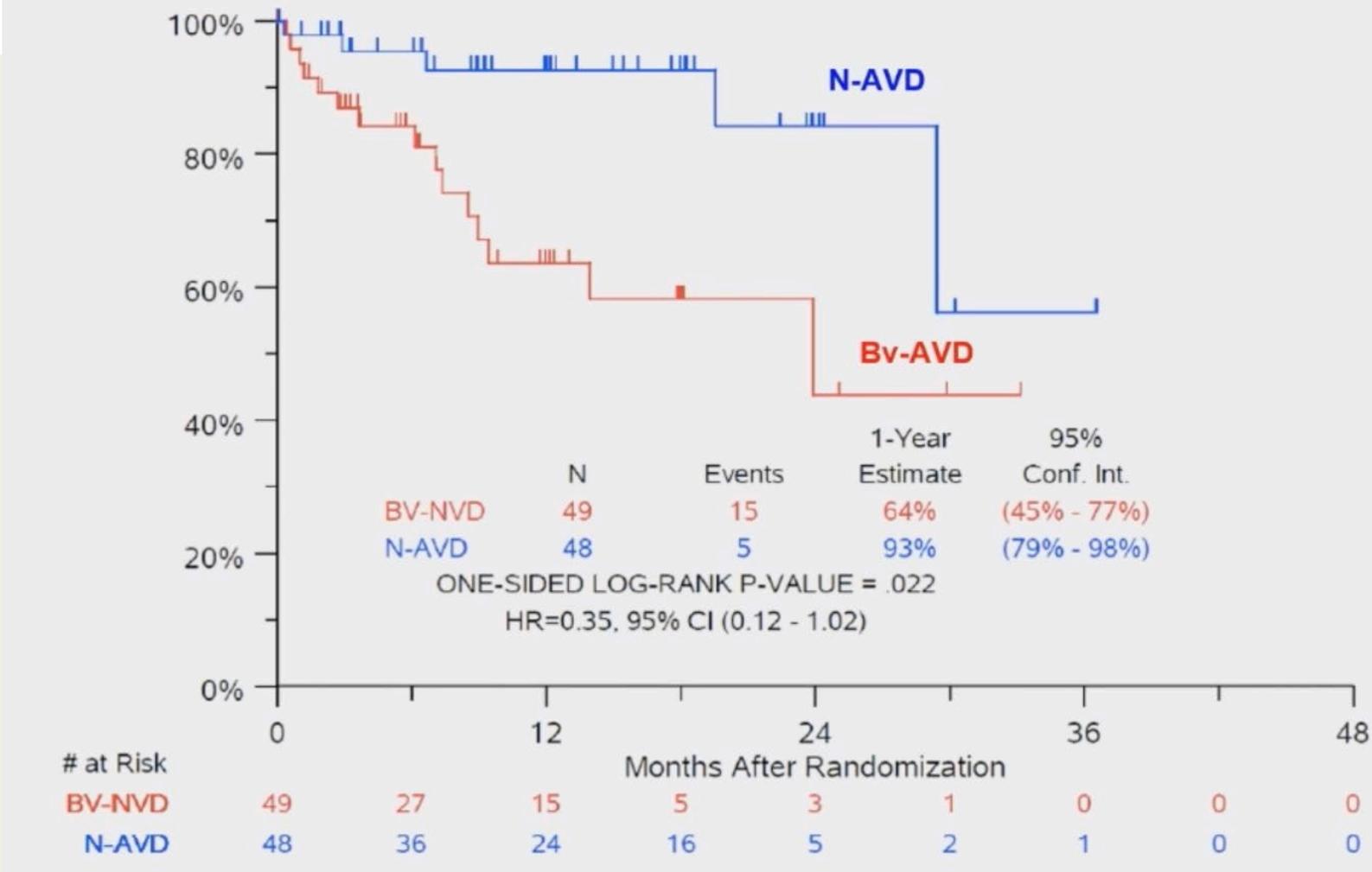


#181: Nivolumab-AVD versus Bv-AVD in Older Patients (Aged > 60 Years) with Advanced Stage Hodgkin Lymphoma - SWOG S1826.

1-year PFS
N-AVD 93%
Bv-AVD 64%

Median follow-up
 12.1 months

p-value = 0.022
 HR=0.35,
 95% CI (0.12-1.02)



#181: Nivolumab-AVD versus Bv-AVD in Older Patients (Aged > 60 Years) with Advanced Stage Hodgkin Lymphoma - SWOG S1826.

Cause of death	N-AVD	Bv-AVD
Infection	1	3
Sepsis	1	2*
Pneumonitis	0	1
Unknown	0	1
Total OS events	2	7

Non-relapse mortality
N-AVD 4% vs Bv-AVD 14%

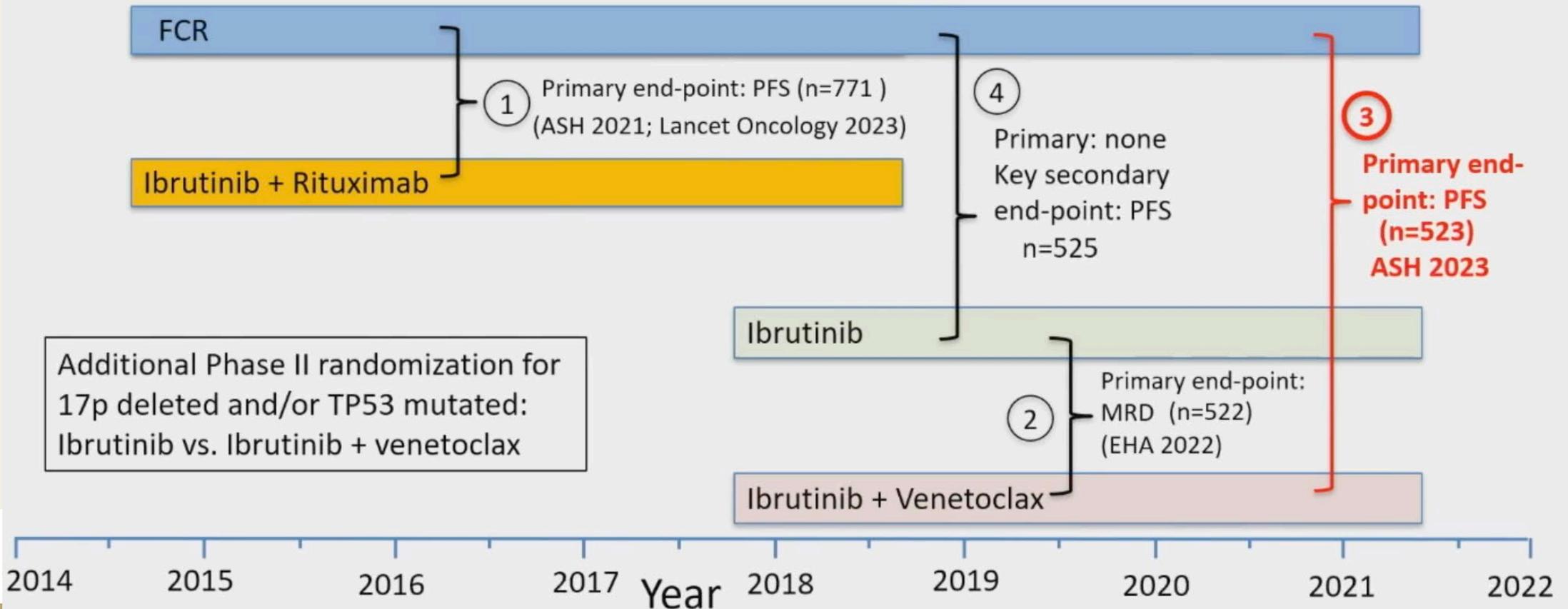


Chronische lymphatische Leukämie

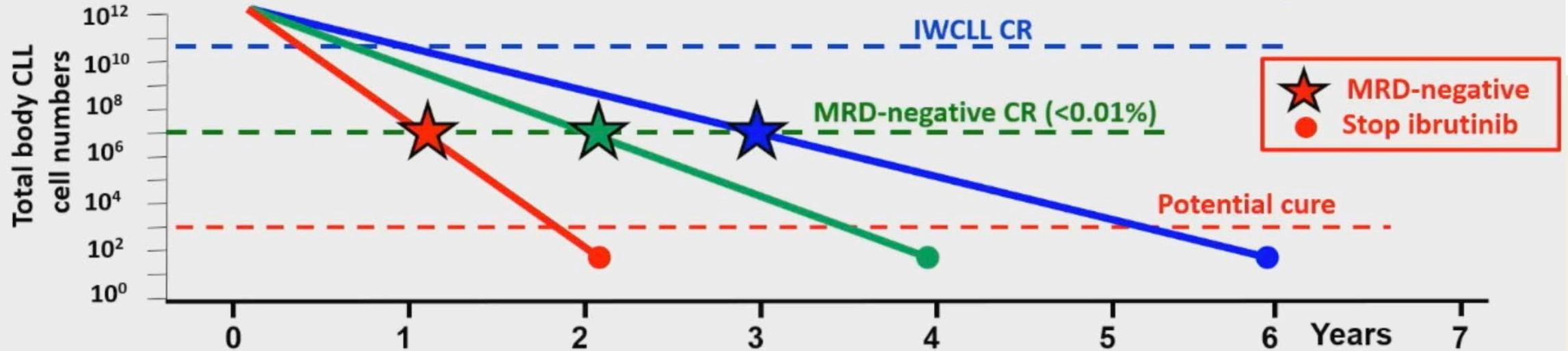


#631: Ibrutinib Plus Venetoclax with MRD-Directed Duration of Treatment Is Superior to FCR and Is a New Standard of Care for Previously Untreated CLL: Report of the Phase III UK NCRI FLAIR Study

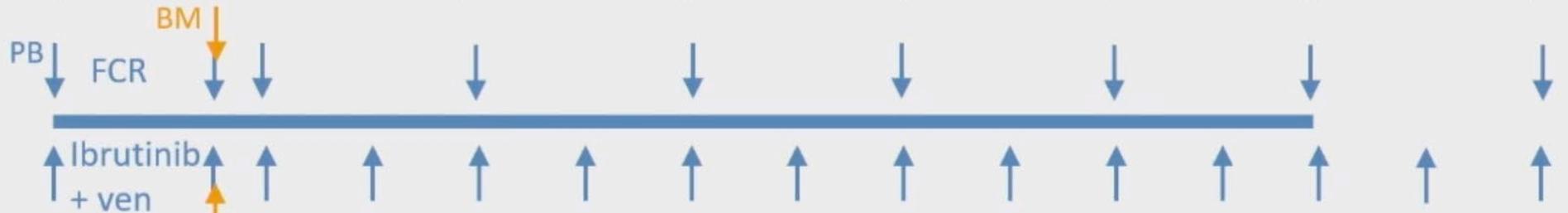
Adaptive design of *Flair*



Stopping rules for ibrutinib + venetoclax in *Flair*



Testing schedule
(Central lab, MRD flow, MRD negative <1 CLL cell in 10^4)



If PB MRD negative repeat after 3 months and then PB and BM at 6 months – if all MRD negative then first PB MRD negative result is time to MRD negativity

Defining treatment duration

2 to 6 years Ibrutinib
or both ibr+venetoclax
Double time after MRD negative

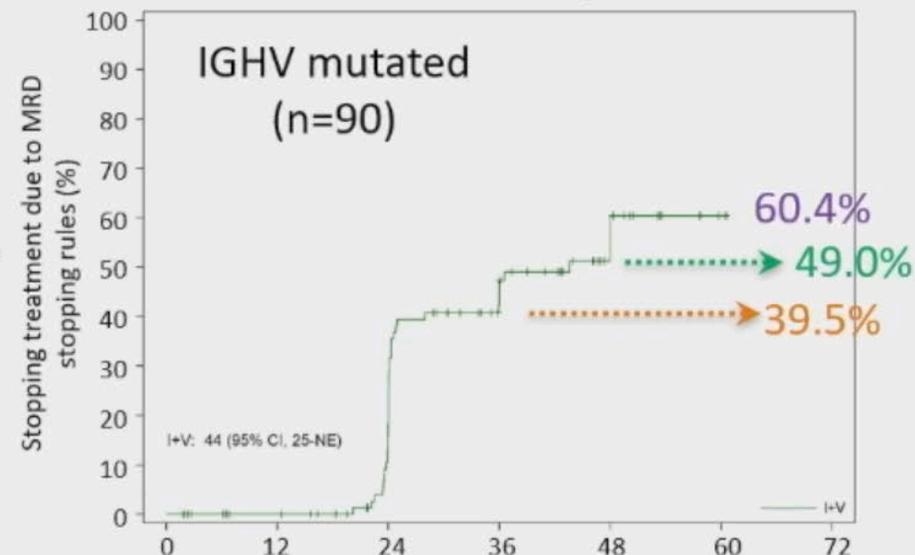
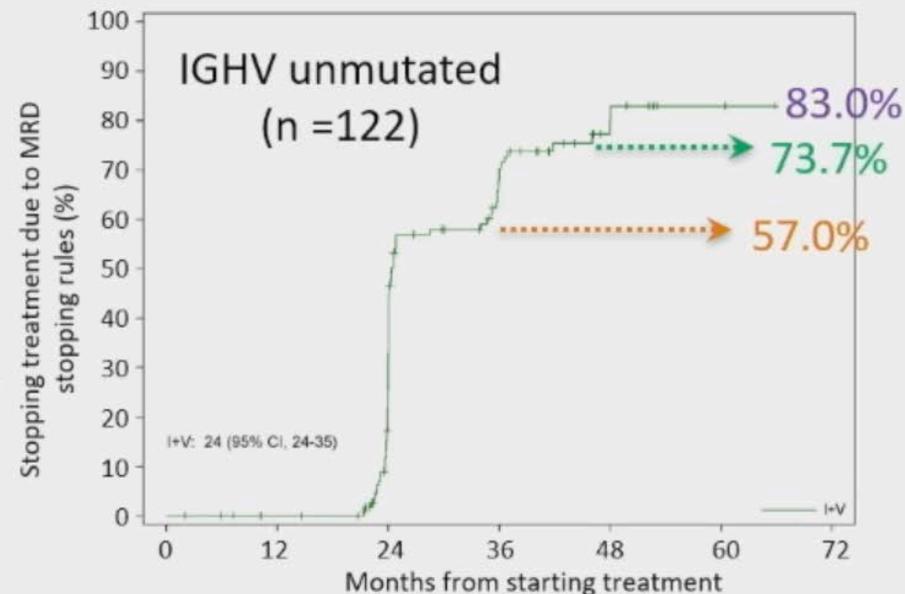
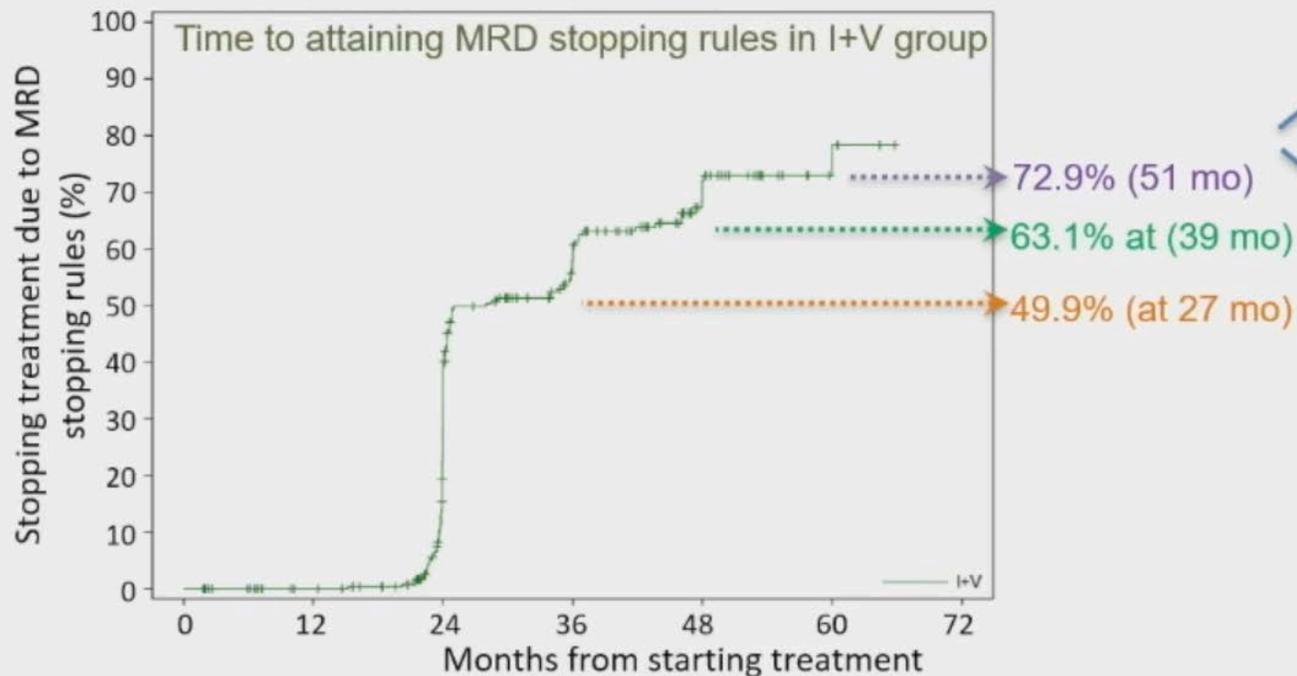


iwCLL Responses

	Complete Response/CRI		Overall Response		BM uMRD
	9 months	Anytime	9 months	Anytime	Anytime
FCR	49%	71.5%	76.4%	83.7%	40.3%
I+V	59.2%	92.3%	86.5%	95.4%	61.9%

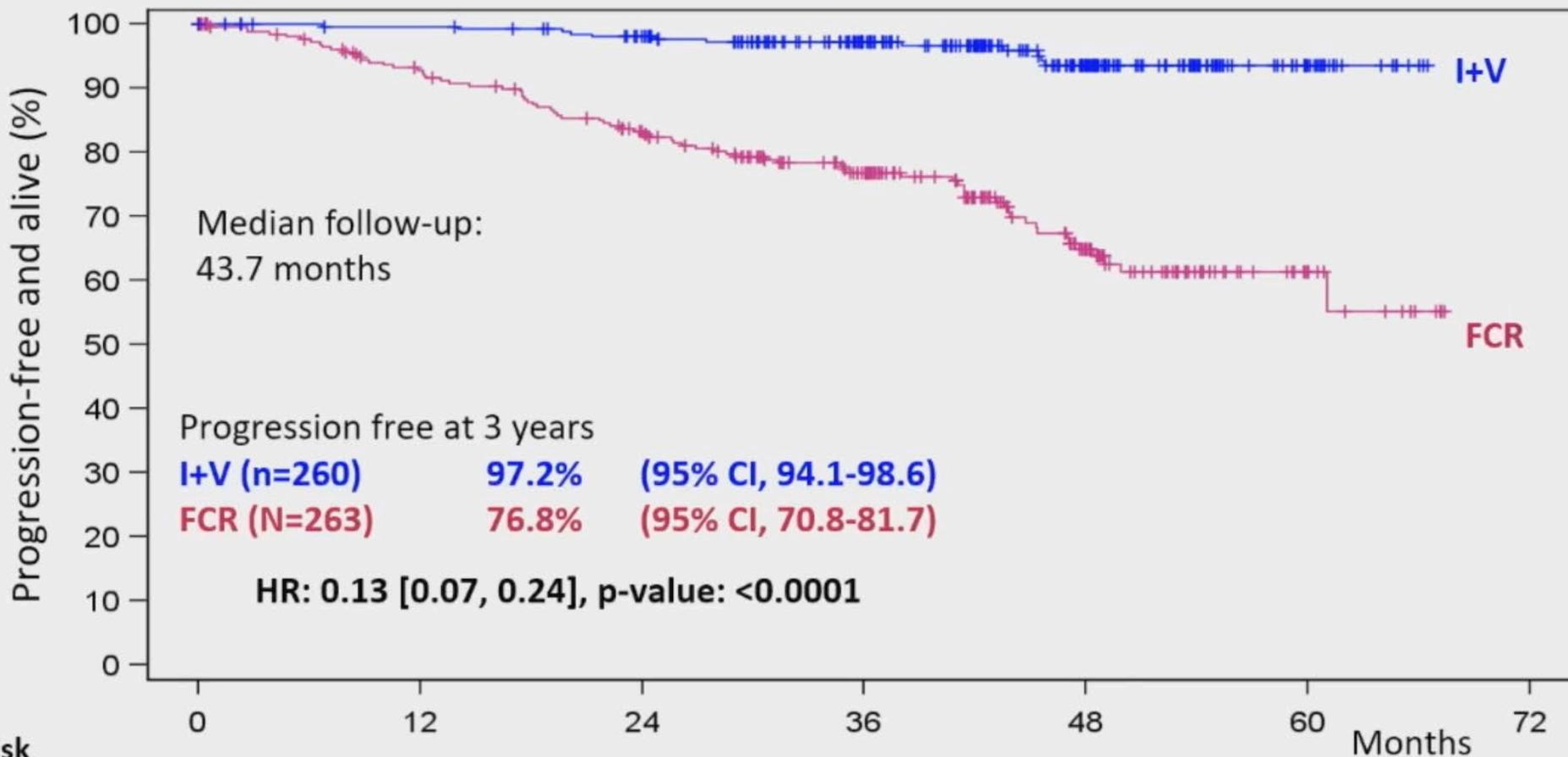
Odds ratio: 1.51
P<0.05

Odds ratio: 2.0
P<0.005



Flair

Primary end-point: PFS for FCR versus I+V



No. at risk

I+V

260

253

239

183

99

21

0

FCR

263

227

194

145

68

12

0

0

12

24

36

48

60

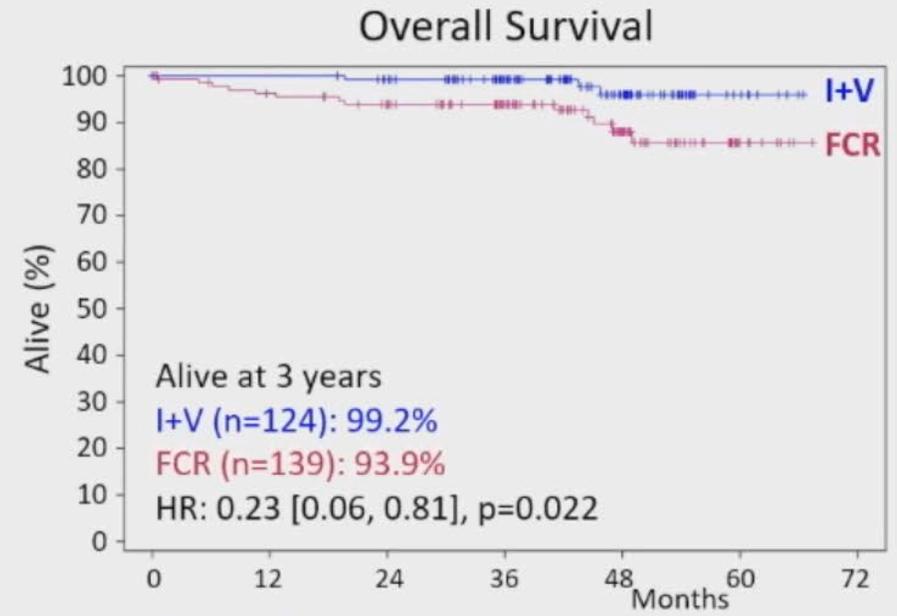
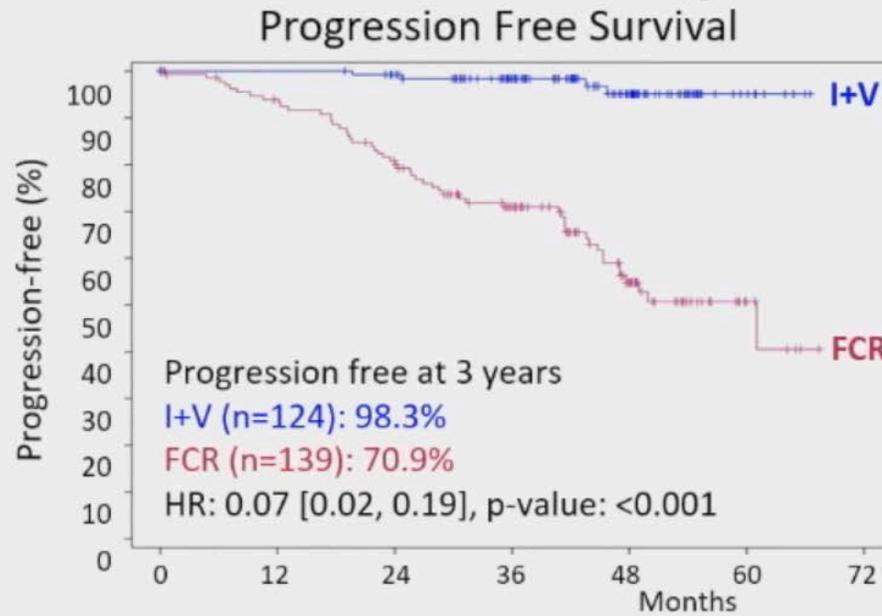
72

Months

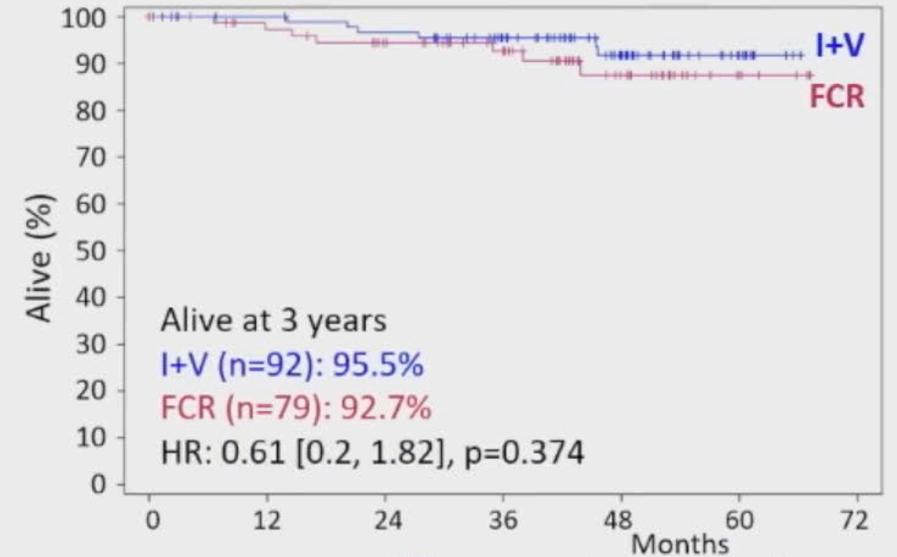
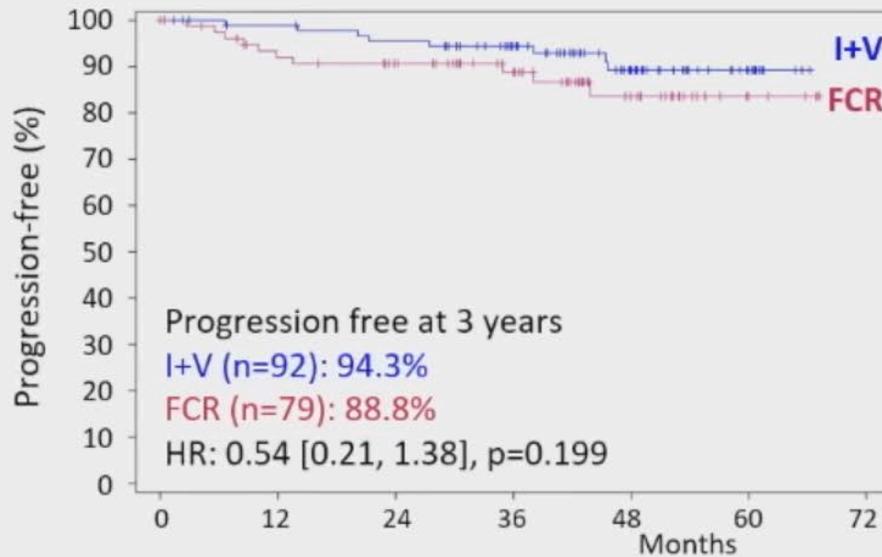


Outcome by IGHV mutation status

IGHV unmutated
(excl. Subset 2)



IGHV mutated
(excl. Subset 2)



SAEs, by MedDRA System organ class

	Number of participants
	FCR (n=239)
Infections and infestations	45 (18.8%)
Blood and lymphatic system disorders	74 (31%)
Cardiac disorders	1 (0.4%)
Gastrointestinal disorders	19 (7.9%)
General disorders and administration site conditions	12 (5%)
Neoplasms benign, malignant and unspecified (including cysts and polyps)	5 (2.1%)
Metabolism and nutrition disorders	0 (0%)
Respiratory, thoracic and mediastinal disorders	6 (2.5%)
Musculoskeletal and connective tissue disorders	3 (1.3%)
Skin and subcutaneous tissue disorders	5 (2.1%)
Nervous system disorders	2 (0.8%)
Eye disorders	0 (0%)

Todesfälle

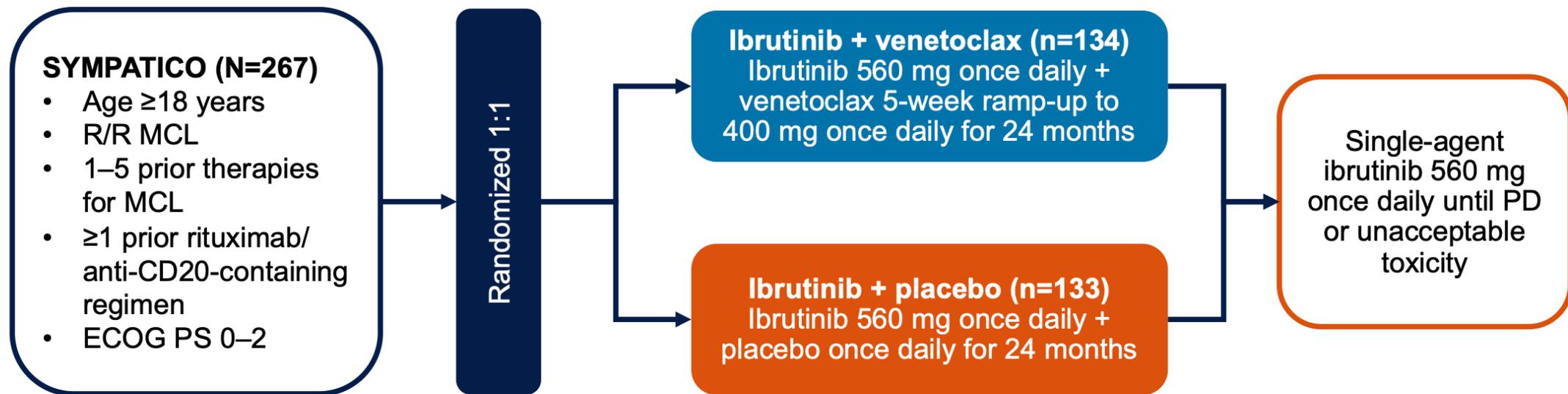
	FCR	I+V
Infection	7	1
Sudden/Cardiac	2	3
COVID-19	2	2
Richter's transformation	2	1
Non-haem malignancy	2	1
Allogeneic SCT – infection	1	0
Allogeneic SCT – GvHD	1	0
Disease progression	1	0
Hemorrhage	1	0
Lymphoma	1	0
Treatment related MDS/BMF	3	0
Total:	23	8

Mantelzell-Lymphom



LBA-2 Ibrutinib Combined with Venetoclax in Patients with Relapsed/Refractory Mantle Cell Lymphoma: Primary Analysis Results from the Randomized Phase 3 Sympatico Study

- SYMPATICO (NCT03112174) is multinational, randomized, double-blind, placebo-controlled, phase 3 study



Stratification: ECOG PS, prior lines of therapy, TLS risk^a

- **Primary endpoint:**
 - PFS by investigator assessment using Lugano criteria
- **Secondary endpoints (tested hierarchically in the following order):**
 - CR rate by investigator assessment
 - TTNT^b
 - OS (interim analysis)
 - ORR by investigator assessment

LBA-2 Ibrutinib & Venetoclax in R/R Mantle Cell Lymphoma: Patientencharakteristika

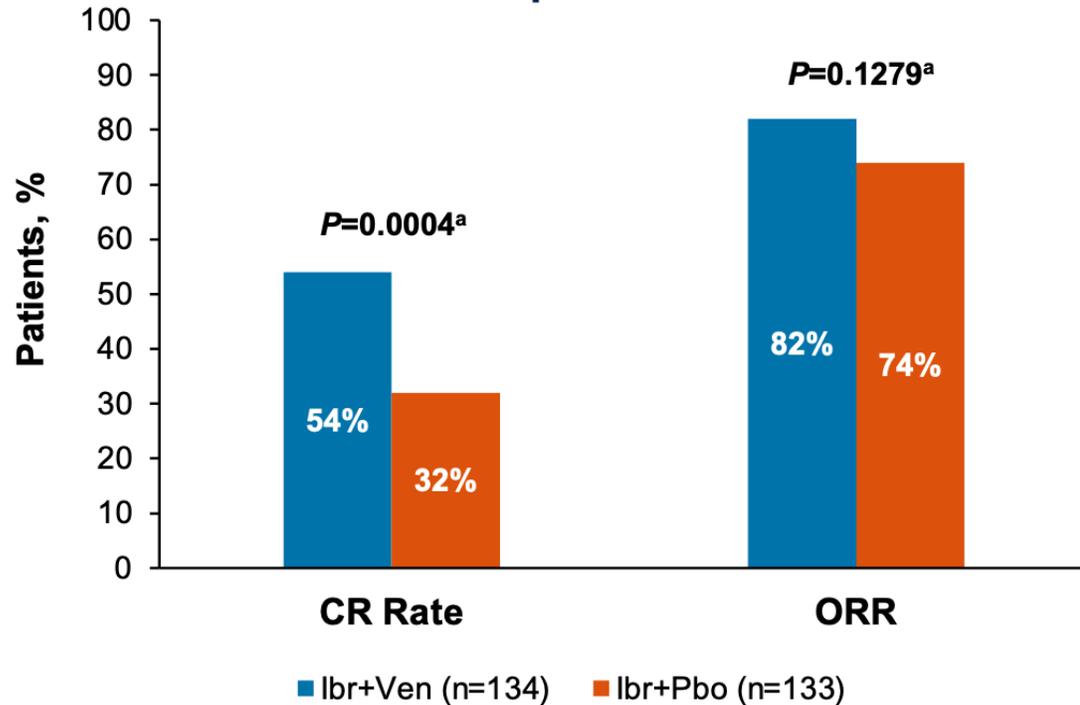
Characteristic	Ibrutinib + venetoclax n=134	Ibrutinib + placebo n=133
Age		
Median (range), years	69 (42–84)	67 (44–88)
≥65 years, n (%)	93 (69)	86 (65)
ECOG PS, n (%)		
0	74 (55)	74 (56)
1–2	60 (45)	59 (44)
Prior lines of treatment, n (%)		
1	80 (60)	79 (59)
2	32 (24)	31 (23)
≥3	22 (16)	23 (17)
MCL histology, n (%)		
Typical	88 (66)	95 (71)
Blastoid	19 (14)	17 (13)
Pleomorphic	8 (6)	6 (5)
Round cell (CLL-like)	1 (1)	0
Other	18 (13)	15 (11)

Characteristic	Ibrutinib + venetoclax n=134	Ibrutinib + placebo n=133
Simplified MIPI score, n (%)		
Low risk	18 (13)	23 (17)
Intermediate risk	63 (47)	68 (51)
High risk	51 (38)	41 (31)
TP53 status, n (%)		
Mutated	40 (30)	37 (28)
Not mutated	66 (49)	57 (43)
Missing	28 (21)	39 (29)
Bulky disease, n (%)		
≥5 cm	62 (46)	53 (40)
≥10 cm	13 (10)	10 (8)
Extranodal disease, n (%)	64 (48)	61 (46)
BM involvement, n (%)	62 (46)	54 (41)
Splenomegaly, n (%)	42 (31)	33 (25)

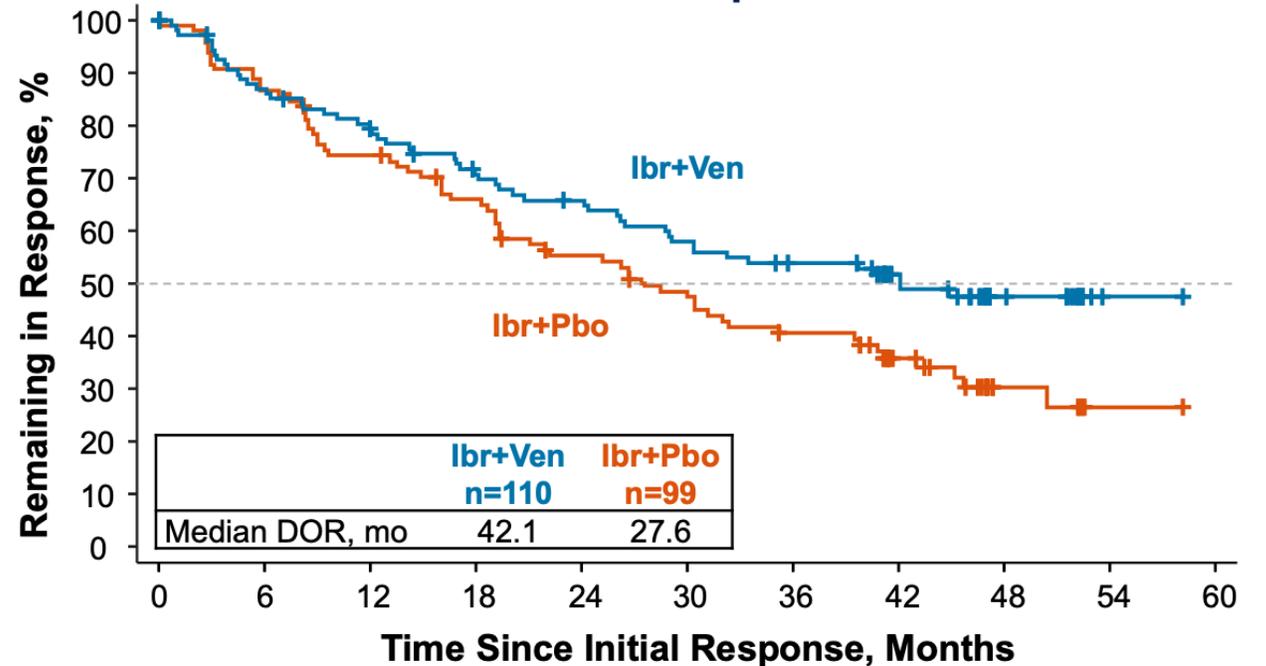


LBA-2 Ibrutinib & Venetoclax in R/R Mantle Cell Lymphoma: Ansprechrates und -dauer

Response Rates



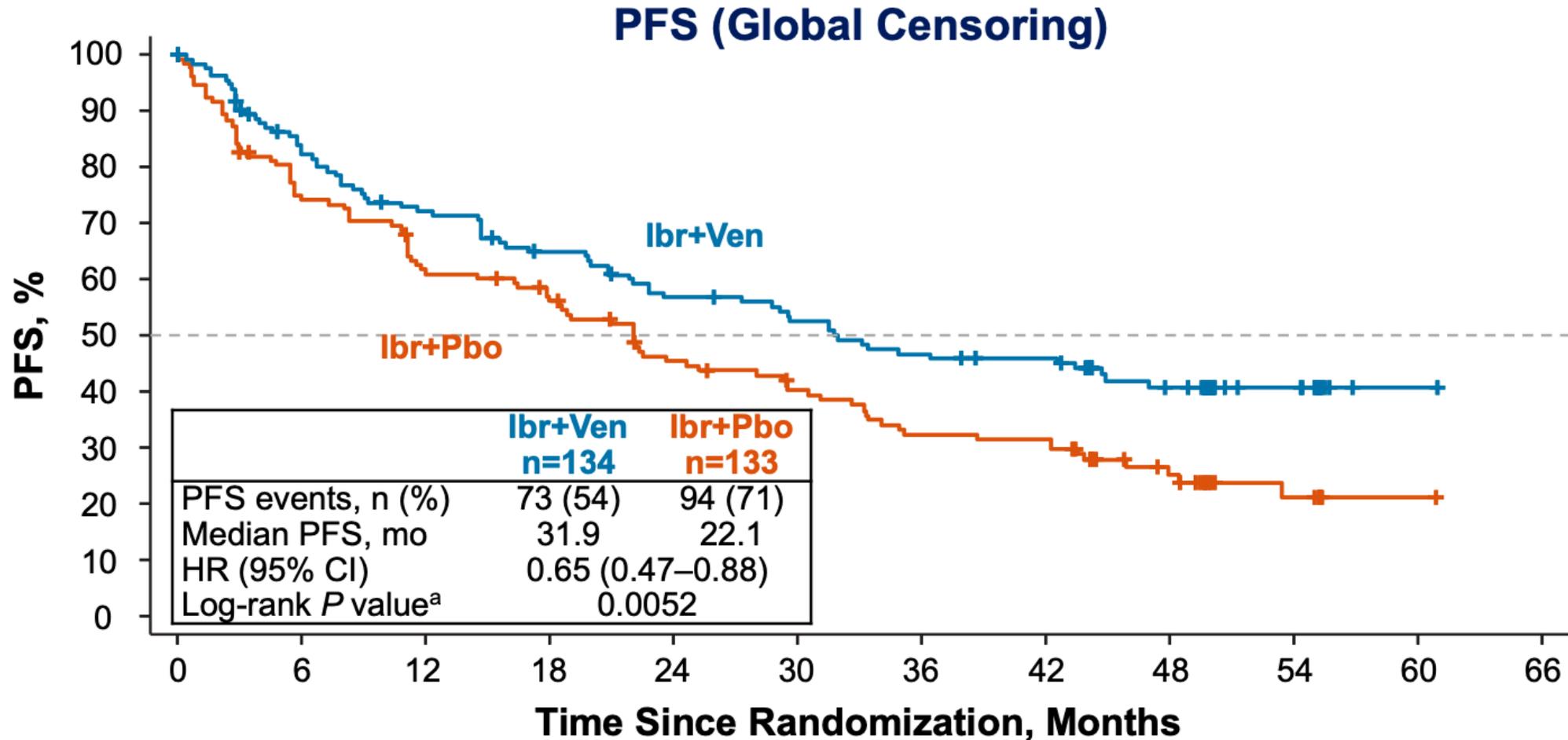
Duration of Response^b



Patients at risk:

Ibr+Ven	110	93	83	72	66	58	52	37	15	1	0
Ibr+Pbo	99	85	72	62	50	42	35	22	8	1	0

LBA-2 Ibrutinib & Venetoclax in R/R Mantle Cell Lymphoma: Progressionsfreies Überleben

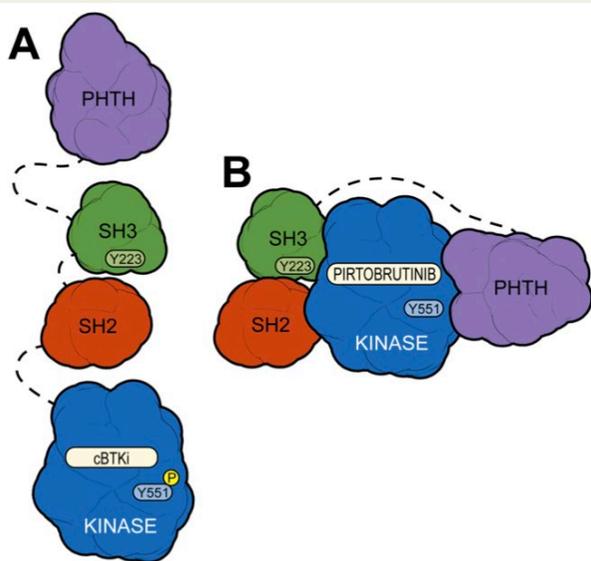


Patients at risk:

	0	6	12	18	24	30	36	42	48	54	60	66
Ibr+Ven	134	107	91	80	69	63	56	53	34	15	1	0
Ibr+Pbo	133	96	79	70	54	46	37	36	18	8	1	0



#981: Pirtobrutinib in Relapsed/Refractory (R/R) Mantle Cell Lymphoma (MCL) Patients with Prior cBTKi: Safety and Efficacy Including High-Risk Subgroup Analyses from the Phase 1/2 BRUIN Study



Gomez et al, Blood 2023

Baseline Characteristics of Patients with MCL

Characteristics	Prior cBTKI n=152	cBTKI Naïve n=14
Median age, years (range)	70 (46-88)	67 (60-86)
Male, n (%)	120 (79)	10 (71)
Histology, n (%)		
Classic/leukemic	120 (79)	11 (79)
Pleomorphic/Blastoid	32 (21)	3 (21)
ECOG PS, n (%)		
0	93 (61)	5 (36)
1	56 (37)	8 (57)
2	3 (2)	1 (7)
sMIPI score, n (%)		
Low risk (0-3)	30 (20)	3 (21)
Intermediate risk (4-5)	79 (52)	5 (36)
High risk (6-11)	43 (28)	6 (43)
Bulky Lymphadenopathy (cm), n (%)		
<5	94 (62)	8 (57)
≥5	36 (24)	5 (36)
No Measurable Lymph Node	22 (15)	1 (7)
Bone marrow involvement, n (%)		
Yes	81 (53)	4 (29)
No	71 (47)	10 (71)
Median number of prior lines of systemic therapy, n (range)	3 (1-9)	2 (1-3)

Characteristics	Prior cBTKI n=152	cBTKI Naïve n=14
Prior therapy, n (%)		
BTK inhibitor	152 (100)	0 (0)
Anti-CD20 antibody	147 (97)	14 (100)
Chemotherapy	137 (90)	14 (100)
Immunomodulator	26 (17)	1 (7)
Stem cell transplant	33 (22)	7 (50)
Autologous	30 (20)	7 (50)
Allogeneic	7 (5)	0 (0)
BCL2 inhibitor	24 (16)	0 (0)
CAR-T	13 (9)	0 (0)
PI3K inhibitor	6 (4)	1 (7)
Reason discontinued any prior BTKi^a, n (%)		
Progressive disease	128 (84)	-
Toxicity / Other	21 (14)	-
Unknown	3 (2)	-
TP53 Mutation status, n (%)		
Yes	30 (20)	3 (21)
No	30 (20)	4 (29)
Missing	92 (61)	7 (50)
Ki-67 index, n (%)		
<30%	18 (12)	2 (14)
≥30%	45 (30)	6 (43)
Missing	89 (59)	6 (43)

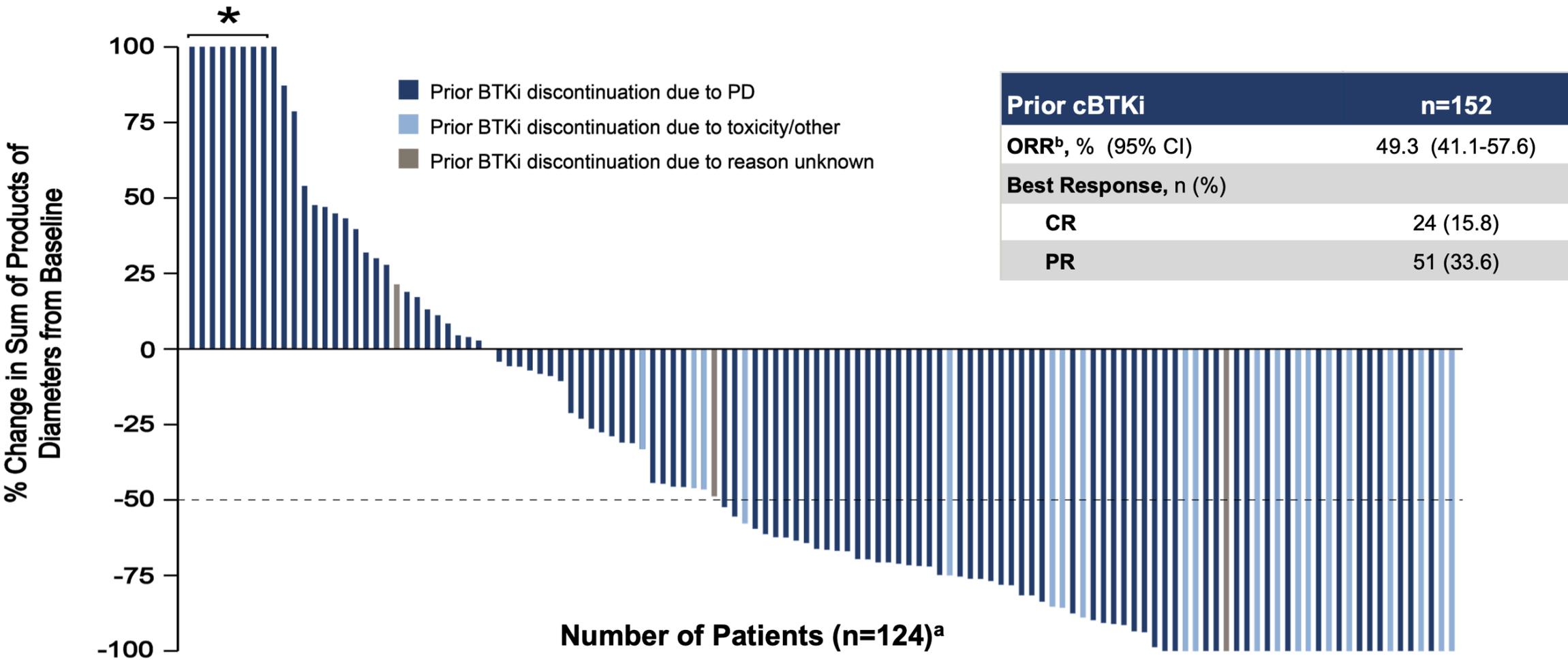
Pirtobrutinib Safety Profile in MCL Patients

Adverse Event	Treatment-Emergent AEs in Patients with MCL (n=166)			
	All Cause AEs, (≥15%), %		Treatment-Related AEs, %	
	Any Grade	Grade ≥3	Any Grade	Grade ≥3
Fatigue	31.9	3.0	21.1	2.4
Diarrhea	22.3	0.0	12.7	0.0
Dyspnea	17.5	1.2	9.0	0.6
Anemia	16.9	7.8	7.2	2.4
Platelet Count Decreased	15.1	7.8	7.8	3.0
AEs of Interest ^a	Any Grade	Grade ≥3	Any Grade	Grade ≥3
Infections ^b	42.8	19.9	15.7	3.6
Bruising ^c	16.3	0.0	11.4	0.0
Rash ^d	14.5	0.6	9.0	0.0
Arthralgia	9.0	1.2	2.4	0.0
Hemorrhage ^e	10.2	2.4	4.2	0.6
Hypertension	4.2	0.6	1.8	0.0
Atrial Fibrillation/Flutter ^{f,g}	3.6	1.8	0.6	0.0

Median time on treatment was 5.5 months for the MCL cohort
Discontinuations due to TRAEs occurred in 3% (n=5) of patients with MCL
Dose reductions due to TRAEs occurred in 5% (n=8) of patients with MCL



Pirtobrutinib Efficacy in Patients with MCL who Received Prior cBTKi

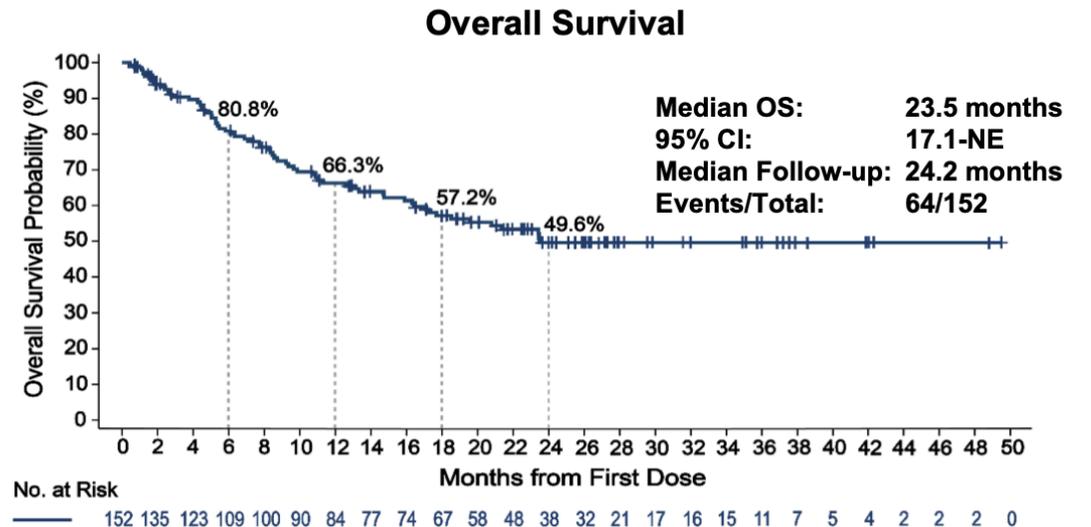
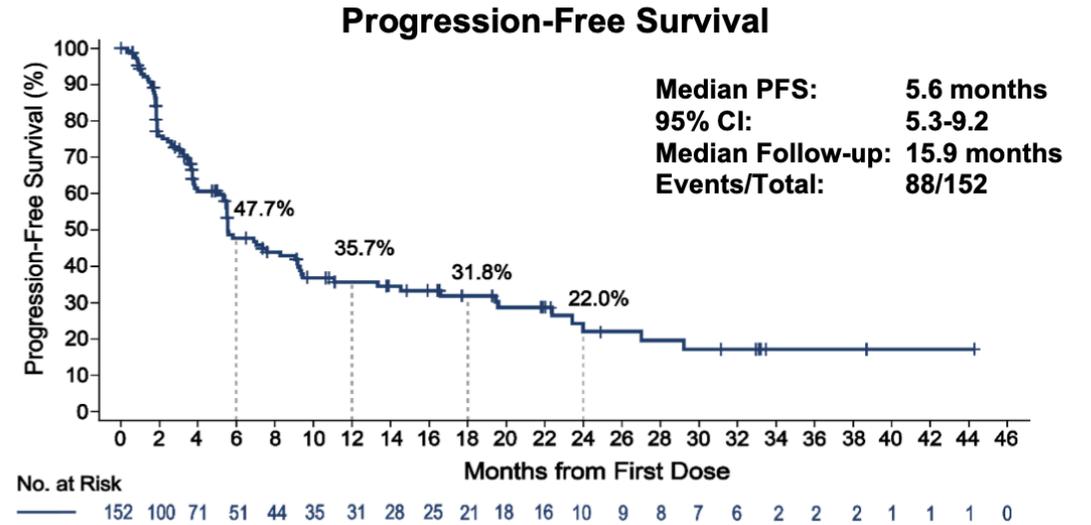
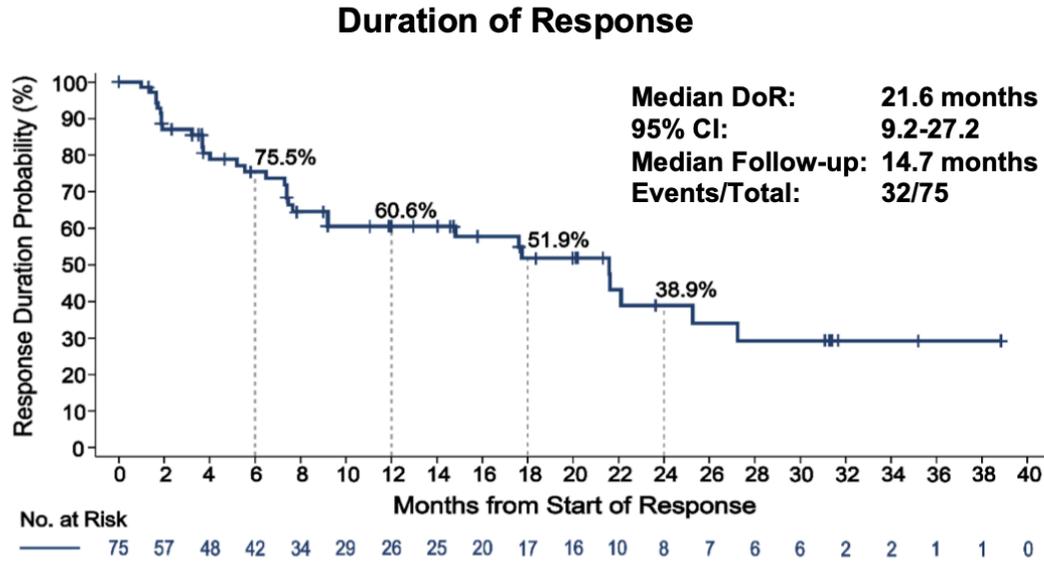


Median Time to First Response was 1.8 months (range: 0.8-13.8)



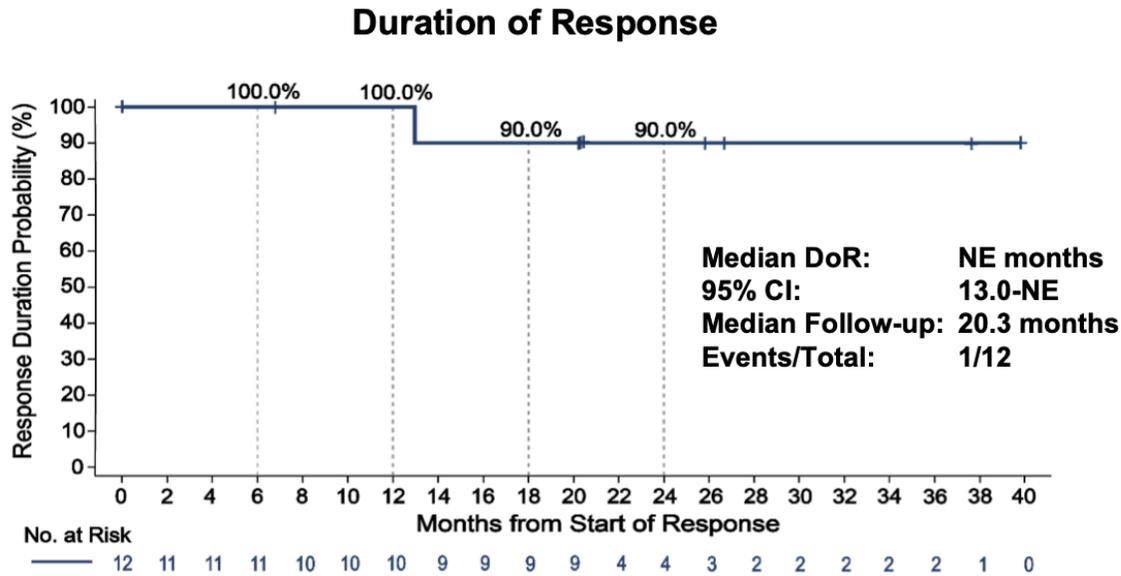
Pirtobrutinib Outcomes in Prior cBTKi Patients with MCL

#981



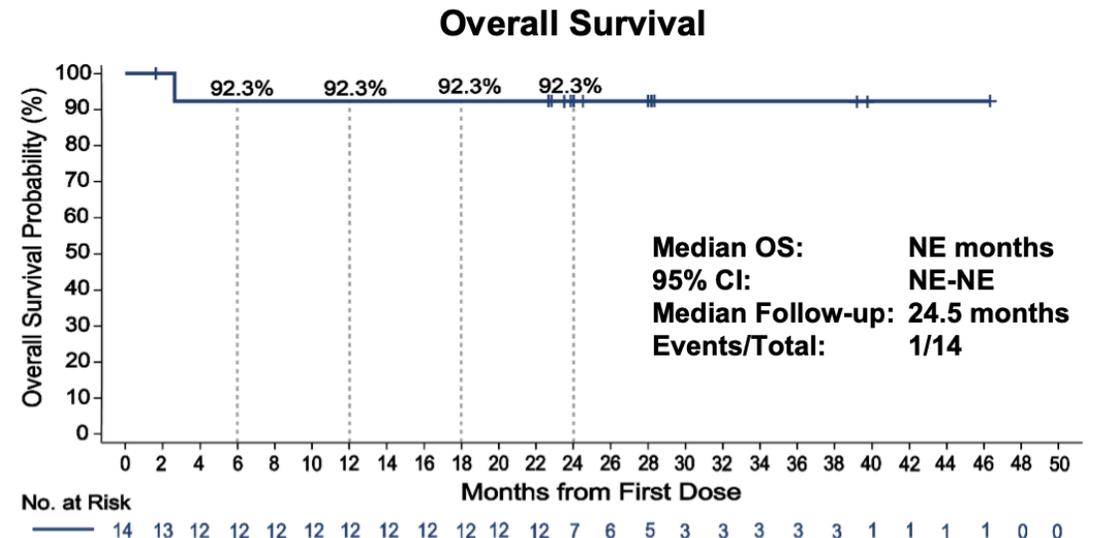
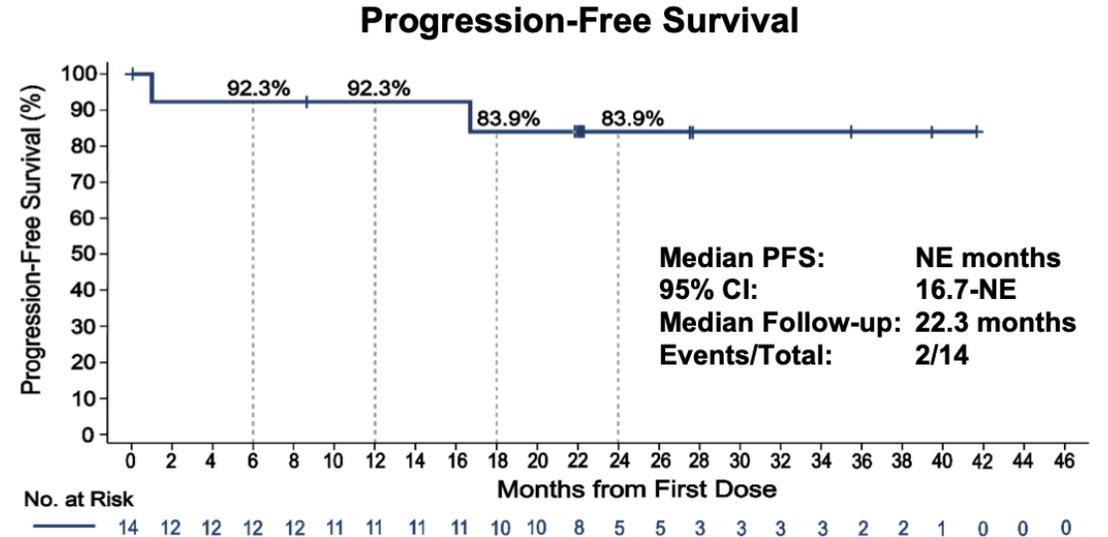
Pirtobrutinib Outcomes in cBTKi Naïve Patients with MCL

#981:



cBTKi Naive Cohort:

- The ORR^a was 85.7% (95% CI: 57.2-98.2)
 - 6 CR (42.9%) and 6 PR (42.9%)



Large B cell lymphoma – LBCL

- DLBCL



#438 Subcutaneous Epcoritamab Plus Lenalidomide in Patients With Relapsed/Refractory Diffuse Large B-Cell Lymphoma From EPCORE NHL-5

Key inclusion criteria: arm 1

- Adults ≥18 y
- Histologically confirmed CD20+ DLBCL^a
 - DLBCL, NOS
 - High-grade B-cell lymphoma with *MYC* and *BCL-2* and/or *BCL-6* translocations
 - FL grade 3B
- R/R disease^b with ≥1 prior anti-CD20 mAb-containing systemic therapy
- ASCT ineligible or failed prior ASCT
- Prior CAR T allowed, but prior CD3/CD20 bispecific antibodies not allowed
- ECOG PS 0–2
- Measurable disease

Data cutoff: Oct 6, 2023
Median follow-up: 8.2 mo

Dose escalation and dose expansion



Epcoritamab dosing schedule

Step-up dosing (SUD)

- Cycle 1, day 1: SUD1 (0.16 mg)
- Cycle 1, day 8: SUD2 (0.8 mg)
- Cycle 1, days 15, 22: full dose (48 mg)
- Cycles 2–3, days 1, 8, 15, 22: full dose (48 mg)
- Cycles 4–12, day 1: full dose (48 mg)

Lenalidomide dosing schedule

Cycles 1–12: 25 mg once daily on days 1–21

Premedication and CRS prophylaxis

Diphenhydramine, acetaminophen, and corticosteroids were mandatory for CRS prophylaxis with the first 4 epcoritamab doses

- Prednisone 100 mg for 4 d was initially recommended
- Current recommendation is dexamethasone 15 mg for 4 d^c

Objectives

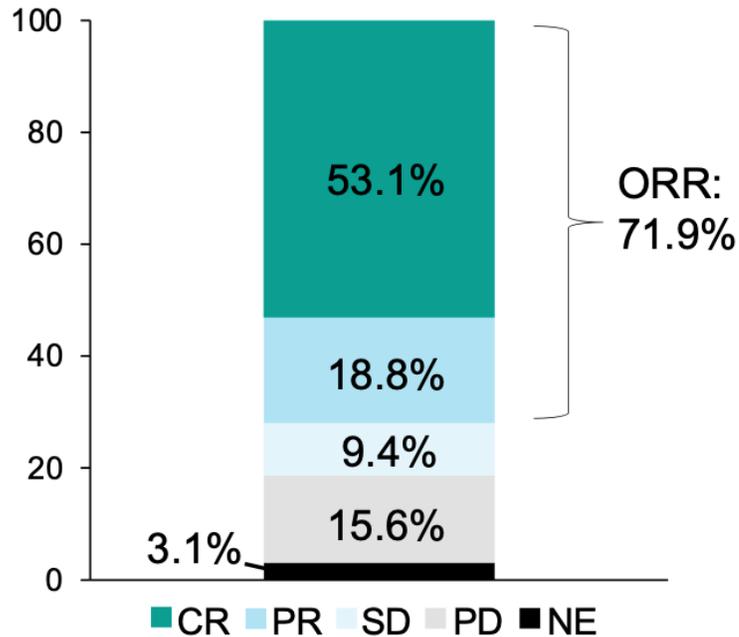
Dose escalation: safety, tolerability, and identify expansion dose (RP2D)
Dose expansion: safety, tolerability, and antitumor activity



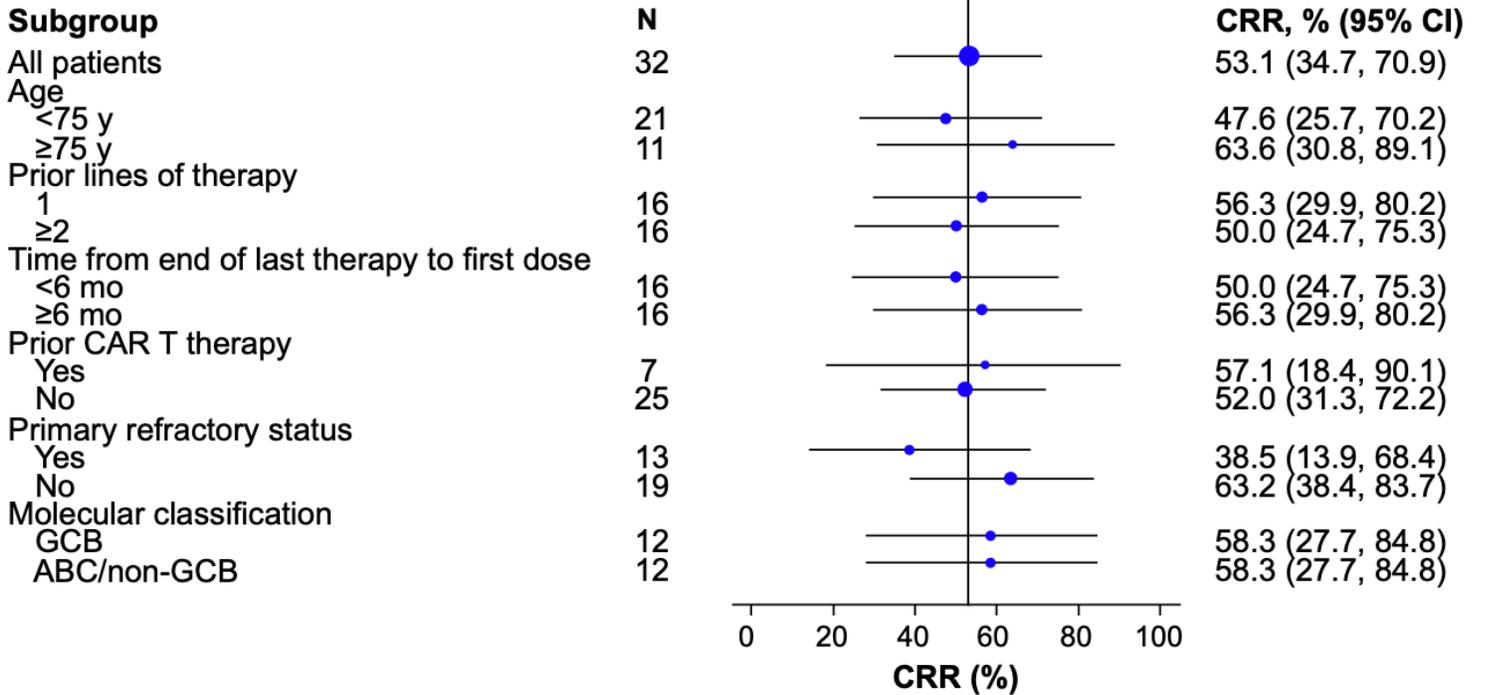
#438 Epcoritamab Plus Lenalidomide in R/R DLBCL EPCORE NHL-5

Therapieansprechen und Subgruppen

Best overall response^a
(N=32)

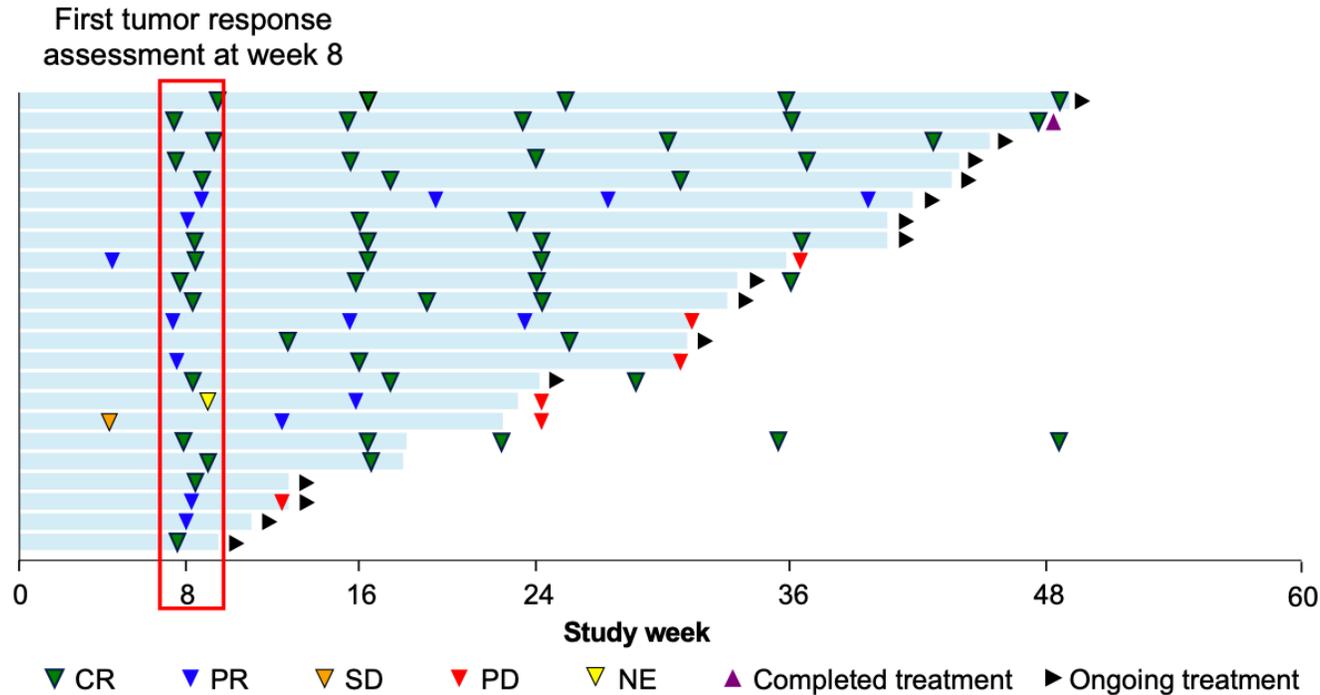


Complete response in subgroups
(N=32)

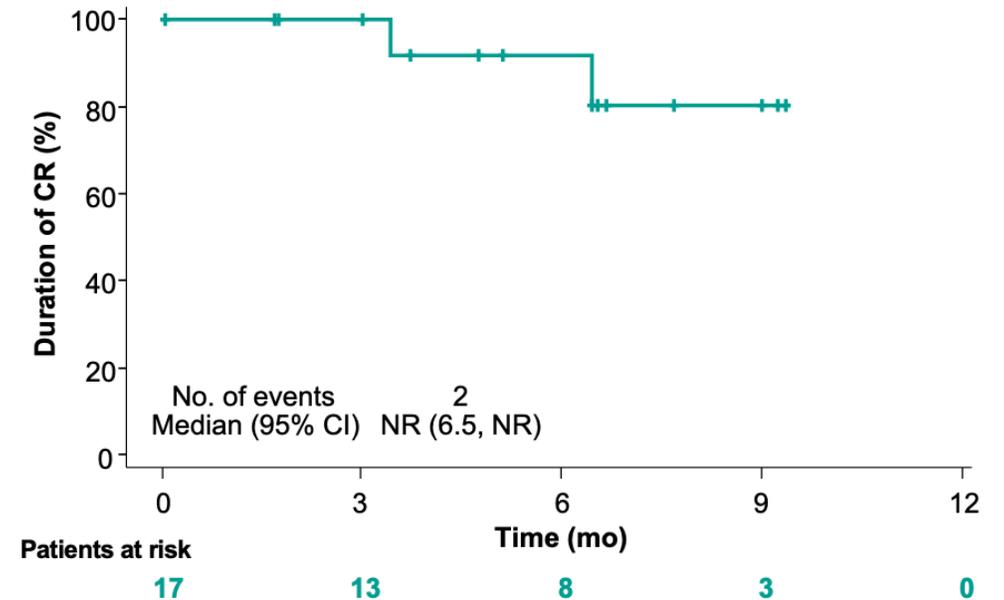


#438 Subcutaneous Epcoritamab Plus Lenalidomide in Patients With Relapsed/Refractory Diffuse Large B-Cell Lymphoma From EPCORE NHL-5

Patients with responses (N=23)^b



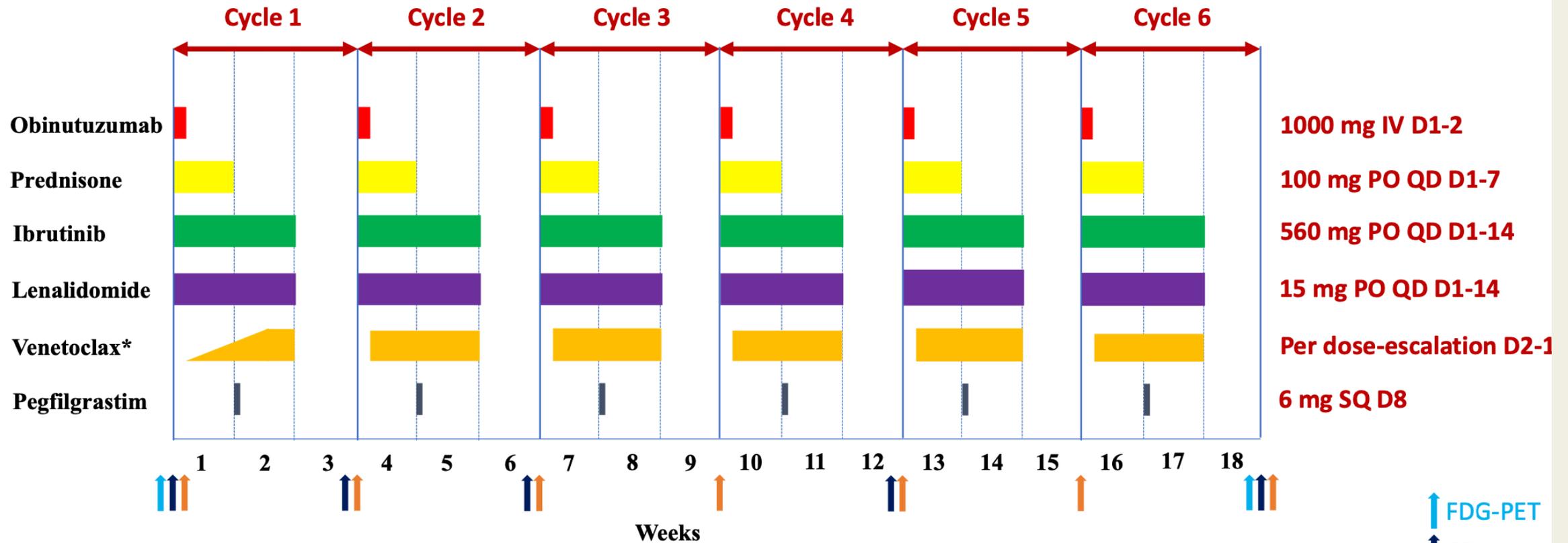
Duration of complete response



- Median time to response was 1.8 mo (range: 1.0–3.6)
- Median time to CR was 1.9 mo (range: 1.6–3.6)
- Median duration of CR was not reached

#434 Phase Ib/II Study of Multi-Targeted Therapy with Venetoclax, Ibrutinib, Prednisone, Obinutuzumab, and Lenalidomide (ViPOR) in Relapsed/Refractory (R/R) Diffuse Large B-Cell Lymphoma (DLBCL)

Maximum 6 cycles 21 days without maintenance



*Venetoclax starts cycle 2 for the first patient cohort

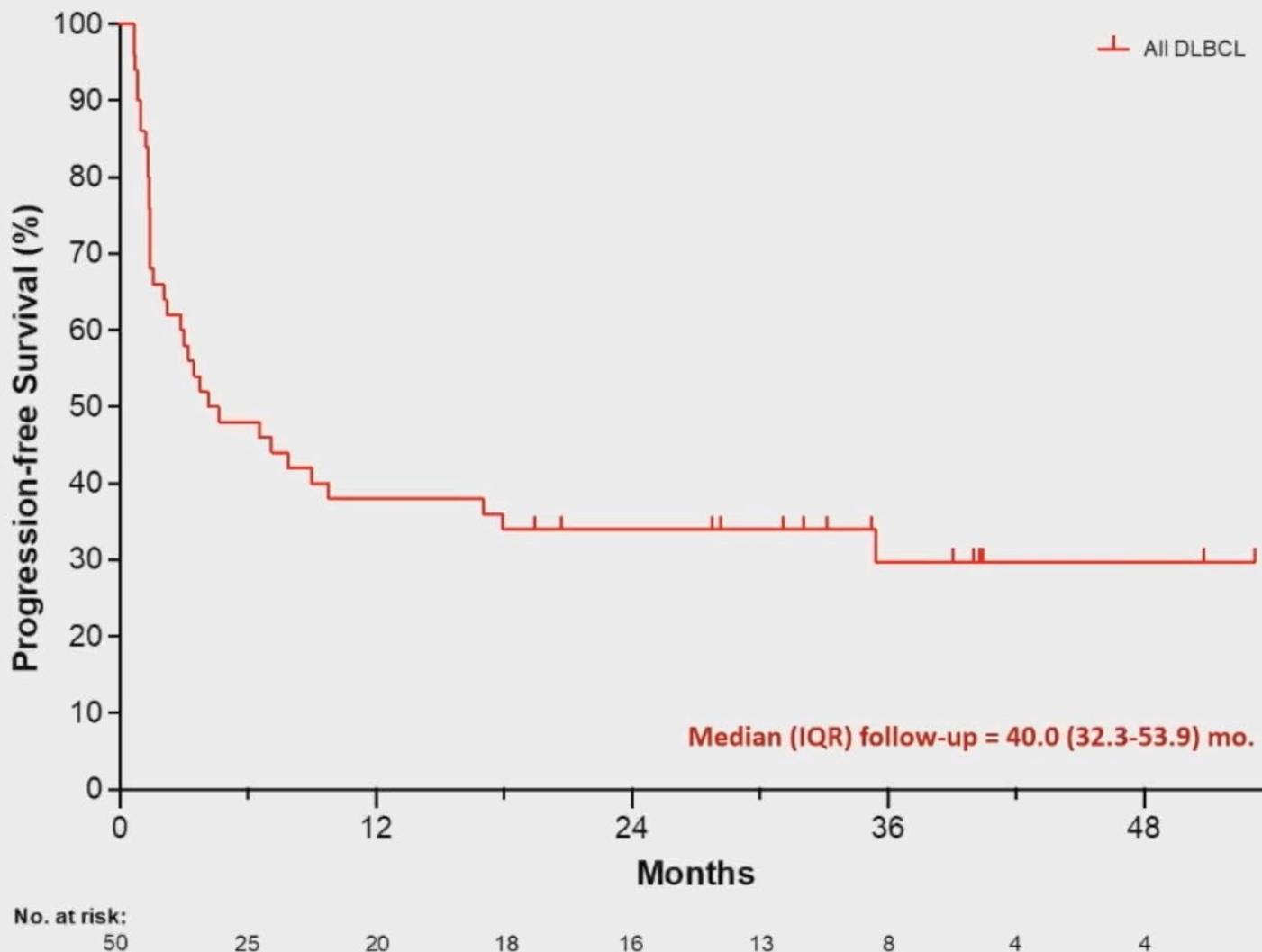
↑ FDG-PET
 ↑ CT
 ↑ ctDNA

Baseline Characteristics in DLBCL Patients

Characteristic	All DLBCL (N=50)
Median (range) age – yr.	61 (29-77)
Male sex – no. (%)	33 (66%)
Disease histology – no. (%)	
Non-GCB DLBCL NOS	13 (26%)
GCB DLBCL NOS	12 (24%)
HGBCL-DH-BCL2	17 (34%)
HGBCL-DH-BCL6	3 (6%)
THRLBCL	5 (10%)
Transformed lymphoma – no. (%)	17 (34%)
Stage III/IV – no. (%)	46 (92%)
IPI \geq 3 – no. (%)	34 (68%)
Median (range) prior therapies	3 (1-9)
Prior CAR-T therapy - no. (%)	20 (40%)
Refractory per SCHOLAR-1 - no. (%)	29 (58%)

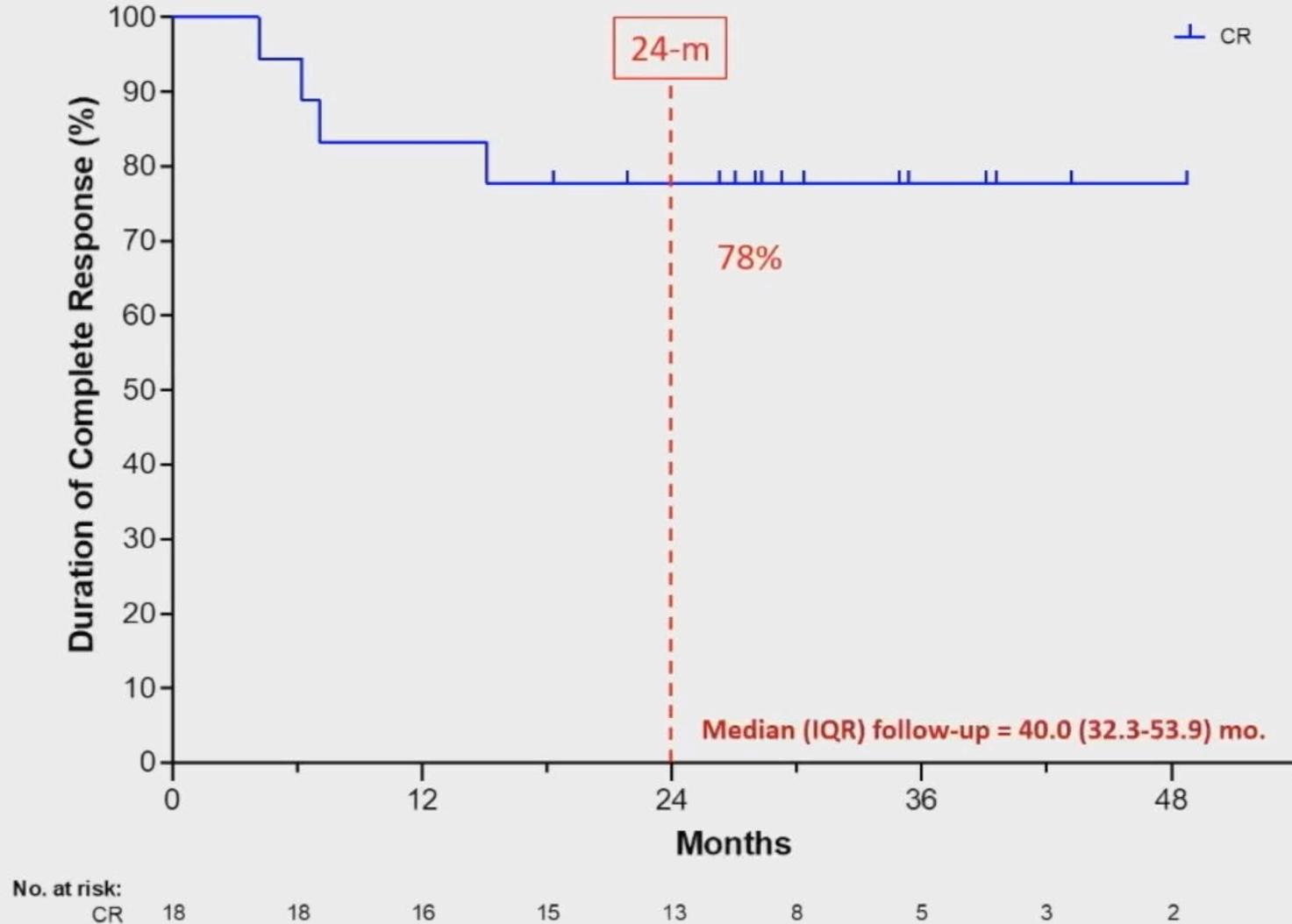
#434

Progression-free Survival in All DLBCL Patients



#434

Duration of Complete Response



Zusammenfassung

Klassisches Hodgkin-Lymphom

Erstlinientherapie für fortgeschrittene Stadien: BrECADD mit geringer gonadaler Toxizität und nicht-unterlegenem Ansprechen
Nivolumab-AVD ist Bretuximab-AVD in fortgeschrittenen Stadien bei älteren Patienten überlegen

Chronische lymphatische Leukämie

Die Kombination von Venetoclax mit Ibrutinib ist FCR bei IgHV-unmutierter CLL fitter Pat in der 1L deutlich überlegen
mehr Sekundärmalignome und Todesfälle mit FCR
MRD-abhängige Therapiedauer

Mantelzell-Lymphom

Im Rezidiv ist Venetoclax-Ibrutinib gegenüber Ibrutinib alleine überlegen
Pirtobrutinib zeigt auch bei BTKi-refraktären (und unverträglichen) Patienten Wirksamkeit
insbesondere aber bei BTKi-naiven MCL

Large B cell lymphoma – LBCL

Im Rezidiv zeigt Epcoritamab in Kombination mit Lenalidomid Wirksamkeit nach allen Vortherapien, inkl. CAR-T
verbesserte Wirksamkeit gegenüber der Monotherapie spekulativ
Die Kombination aus Venetoclax – Ibrutinib – Prednisolon – Obinutuzumab – Lenalidomide **ViPOR** ist bei ungünstigen
Subtypen überraschend effektiv - in günstigen (GCB) dagegen nicht



und am Ende....

**Vielen Dank für
Ihre Aufmerksamkeit**