

The Annual National General Medical Oncology Summit

Saturday, March 23, 2024

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The Annual National General Medical Oncology Summit

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Co-Moderators

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Vikas Malhotra, MD

Overview

Saturday, March 23rd

Module 1: 7:30 AM – 9:10 AM — Hodgkin and Non-Hodgkin Lymphoma

Module 2: 9:30 AM – 10:20 AM — Gynecologic Cancers

Module 3: 10:20 AM – 11:10 AM — Localized Breast Cancer; SABCS 2023 Review

Module 4: 11:10 AM – 12:00 PM — Metastatic HER2-Positive and Triple-Negative Breast Cancer; SABCS 2023 Review

Module 5: 12:30 PM – 1:20 PM — Prostate Cancer

Module 6: 1:20 PM – 2:10 PM — Urothelial Bladder Cancer

Module 7: 2:10 PM – 3:00 PM — Renal Cell Carcinoma

Overview

Module 8: 3:20 PM – 4:10 PM — Targeted Therapy for Non-Small Cell Lung Cancer

Module 9: 4:10 PM – 5:00 PM — Nontargeted Treatments for Lung Cancer

Sunday, March 24th

Module 10: 7:30 AM – 8:20 AM — Multiple Myeloma

Module 11: 8:20 AM – 9:10 AM — Gastroesophageal Cancers

Module 12: 9:30 AM – 10:20 AM — Hepatobiliary Cancers

Module 13: 10:20 AM – 11:10 AM — Colorectal Cancer

Module 14: 11:10 AM – 12:00 PM — Pancreatic Cancer

Disclosures for Moderator Neil Love, MD

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: AbbVie Inc, Adaptive Biotechnologies Corporation, ADC Therapeutics, Agios Pharmaceuticals Inc, Alexion Pharmaceuticals, Amgen Inc, Array BioPharma Inc, a subsidiary of Pfizer Inc, Astellas, AstraZeneca Pharmaceuticals LP, Aveo Pharmaceuticals, Bayer HealthCare Pharmaceuticals, BeiGene Ltd, BeyondSpring Pharmaceuticals Inc, Blueprint Medicines, Boehringer Ingelheim Pharmaceuticals Inc, Bristol Myers Squibb, Celgene Corporation, Clovis Oncology, Coherus BioSciences, CTI Biopharma, a Sobi company, Daiichi Sankyo Inc, Eisai Inc, Elevation Oncology Inc, EMD Serono Inc, Epizyme Inc, Exact Sciences Corporation, Exelixis Inc, Five Prime Therapeutics Inc, Foundation Medicine, G1 Therapeutics Inc, Genentech, a member of the Roche Group, Genmab US Inc, Gilead Sciences Inc, Grail Inc, GSK, Halozyme Inc, Helsinn Healthcare SA, ImmunoGen Inc, Incyte Corporation, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc, Karyopharm Therapeutics, Kite, A Gilead Company, Kronos Bio Inc, Legend Biotech, Lilly, Loxo Oncology Inc, a wholly owned subsidiary of Eli Lilly & Company, 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, Oncopeptides, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, R-Pharm US, Sanofi, Seagen Inc, Servier Pharmaceuticals LLC, SpringWorks Therapeutics Inc, Stemline Therapeutics Inc, Sumitomo Dainippon Pharma Oncology Inc, Taiho Oncology Inc, Takeda Pharmaceuticals USA Inc, TerSera Therapeutics LLC, Tesaro, A GSK Company, TG Therapeutics Inc, Turning Point Therapeutics Inc, Verastem Inc, and Zymeworks Inc.

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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.

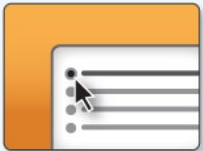
This program will contain discussion of non-FDA-approved uses of agents and regimens. Please refer to official prescribing information for each product for approved indications.

Clinicians in the Meeting Room

Networked iPads are available.



Review Program Slides: Tap the Program Slides button to review speaker presentations and other program content.



Answer Survey Questions: Complete the premeeting survey.



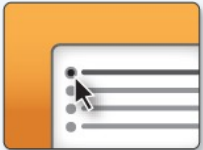
Ask a Question: Tap Ask a Question to submit a challenging case or question for discussion. We will aim to address as many questions as possible during the program.

For assistance, please raise your hand. Devices will be collected at the conclusion of the activity.

Clinicians Attending via Zoom



Review Program Slides: A link to the program slides will be posted in the chat room at the start of the program.



Answer Survey Questions: Complete the pre- and postmeeting surveys.



Ask a Question: Submit a challenging case or question for discussion using the Zoom chat room.



Get CE Credit: A CE credit link will be provided in the chat room at the conclusion of the program.

For assistance, please raise your hand. Devices will be collected at the conclusion of the activity.

About the Enduring Program

- The live meeting is being video and audio recorded.
- The proceedings from this weekend will be edited and developed into an enduring web-based video/PowerPoint program. An email will be sent to all attendees when the activity is available.
- To learn more about our education programs, visit our website, www.ResearchToPractice.com



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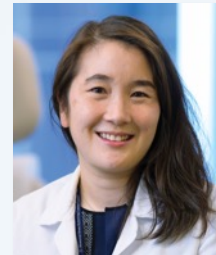
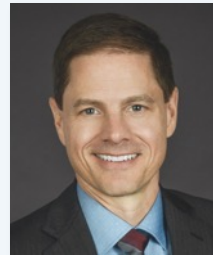
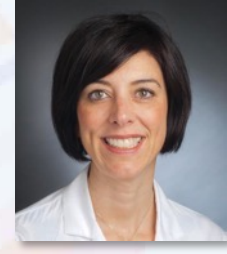
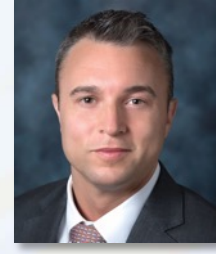
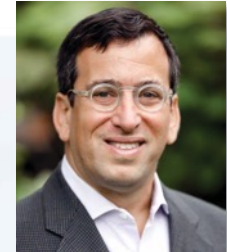
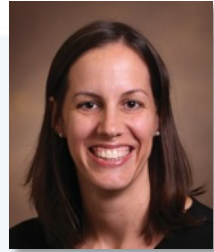
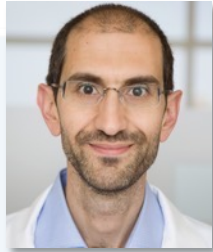
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Third Annual National General Medical Oncology Summit



Agenda

Module 1: Follicular Lymphoma (FL) — Dr Zelenetz

Module 2: Mantle Cell Lymphoma (MCL) — Dr Lunning

Module 3: Hodgkin Lymphoma (HL) — Dr LaCasce

Module 4: Diffuse Large B-Cell Lymphoma (DLBCL) — Dr Maddocks

Agenda

Module 1: Follicular Lymphoma (FL) — Dr Zelenetz

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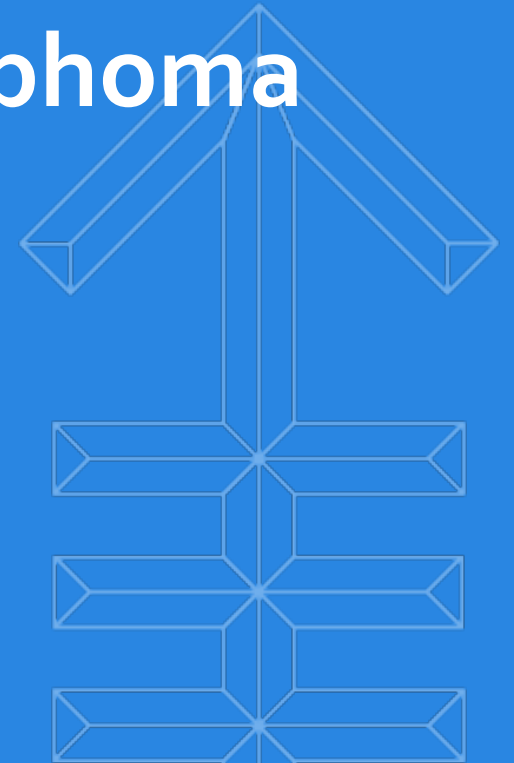
Immunotherapy for R/R Follicular Lymphoma

Andrew D. Zelenetz, M.D., Ph.D.

Attending Physician, Lymphoma Service

Professor of Medicine, Weill-Cornell Medical College

Chair, NCCN NHL Guideline Panel



Disclosures

Consulting Agreements	AbbVie Inc, Adaptive Biotechnologies Corporation, Amgen Inc, AstraZeneca Pharmaceuticals LP, Celgene Corporation, Genentech, a member of the Roche Group, Gilead Sciences Inc, Janssen Biotech Inc, MEI Pharma Inc, MorphoSys, Novartis
Contracted Research	BeiGene Ltd, Genentech, a member of the Roche Group, MEI Pharma Inc
Data and Safety Monitoring Boards/Committees	BeiGene Ltd (DMC chair), Bristol Myers Squibb, Celgene Corporation, Juno Therapeutics, a Celgene Company



76-year old man with multiply recurrent follicular lymphoma

- 09/2012: Presented with a sigmoid mass at 28 cm, biopsy demonstrated FL, grade 1-2 (“classical follicular lymphoma”), stage IE (sigmoid)
- 10/24-11/13/2012: Rituximab weekly x 4 with CR
- 10/2015: CT with progressive abdominal nodes, biopsy recurrent FL, active surveillance
- 11/2016: Progressive abdominal pain, PET with area of high grade FDG avid disease, biopsy DLBCL
- 12/19/2016-03/30/2017: R-CHOP x 6 with PET CR
- 08/2019: CT with progressive mesenteric and retroperitoneal nodes, biopsy FL, grade 1-2
- 09/2019-01/2020: Rituximab lenalidomide x 4, < PR
- 01/2020-06/2020: Obinutuzumab-bendamustine with PET CR
- 09/2022: PET with POD, biopsy FL, grade 1-2, low tumor burden active surveillance
- 12/2022: Short interval can with POD
- 02/2023-01/2024: Mosunetuzumab, PR after 8 cycles, EOT POD
- 02/2023: Refer for CAR T-cell



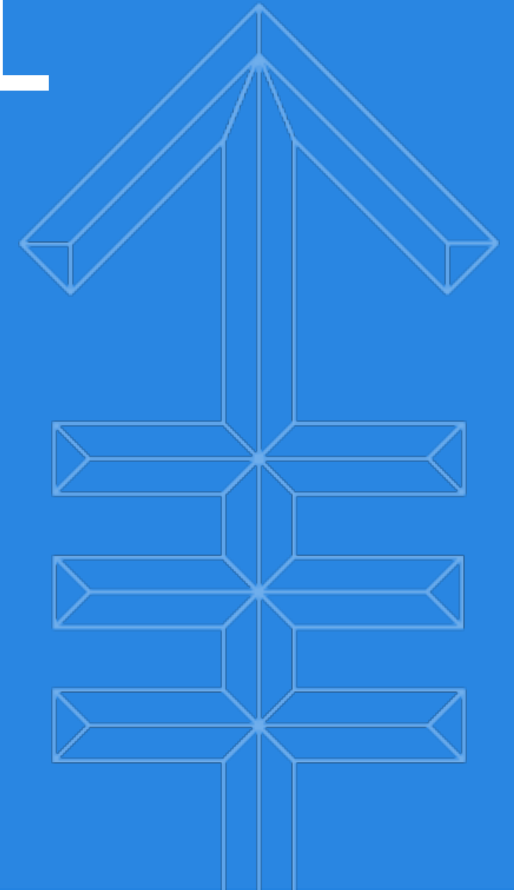
76-year old man with multiply recurrent follicular lymphoma

- Was the sequencing of immunotherapy appropriate with bispecific then CAR T-cells?
- Should CAR T-cells have been used first?



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Management of Relapsed FL



Options for Treatment at Relapse

Established

- Rituximab (R)
- Chemoimmunotherapy not used in 1L ± maintenance
- High dose therapy/autologous stem cell rescue or allogeneic stem cell transplant
- R/G+lenalidomide
- Tazemetostat
- G-zanubrutinib
- Tisagenlecleucel
- Axicabtagene maraleucel
- Mosunetuzumab

Investigational (very partial list)

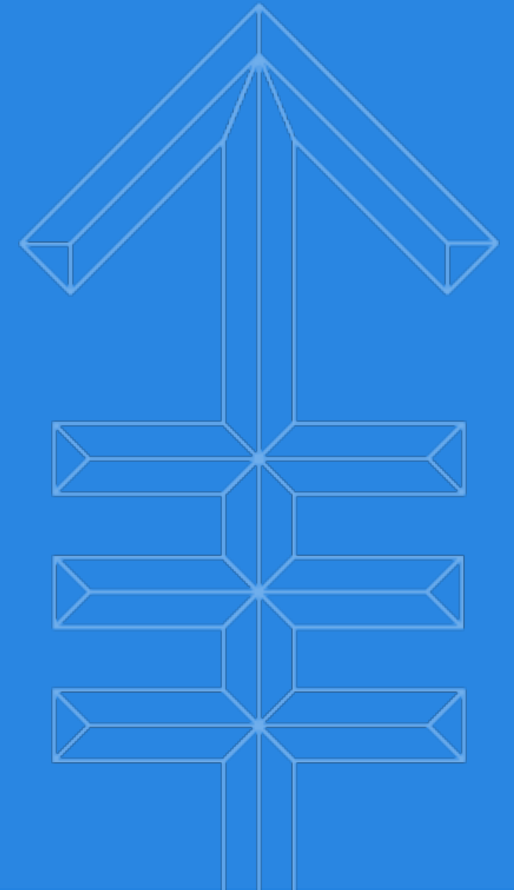
- Antibody drug conjugates
- BH3 mimetics
- CelMODs
- Degraders
- CART-cells
 - Lisocabtagene maraleucel
- Bispecific antibodies
 - Ondronexamab
 - Epcoritamab
 - Glofitamab

Consider clinical trials prior to development of refractory disease



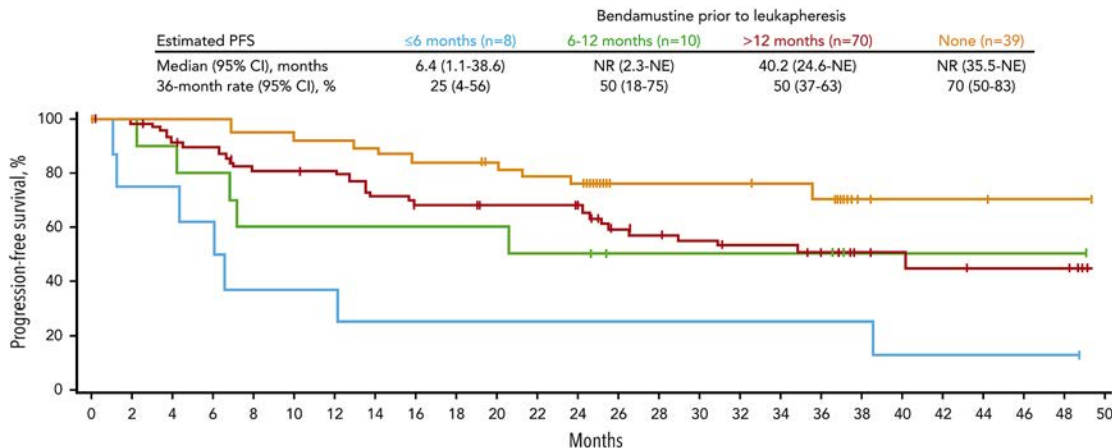
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T-cell Engager and CAR T-cells Relapsed/Refractory Disease



Comparison of CAR-T therapy data in Follicular Lymphoma

Brand name (generic)	Axicabtagene ciloleucel ¹		Tisagenlecleucel ²
Study population	R/R iNHL after ≥2 prior therapies		R/R FL after ≥2 prior therapies or post HDT/ASCR
Histology	FL	MZL	FL grade 1-3A
Median prior therapies (IQR) ^{b,c}	3 (1-10)	3 (2-8)	4 (2-13)
Sample size for efficacy	n=127	MZL n=31	n=97
Median follow-up, mo (IQR)	41.7	MZL 31.8	28.9
ORR (95% CI)	94%	MZL 77%	86.2%
CRR	79%	MZL 65%	68.1%
mPFS	40.2 m	Not reached	NR (8.7-NE) [24-mo PFS 57.4% (46.2-67)]
AEs of special interest (% of patients) ^{b,c}	CRS (all grades, 78%; grade 3+, 7%); neurologic AE (all grades, 56%; grade 3+, 15%)		CRS (all grades, 47%; grade 3+, 0%), serious neurological AE (all grades, 10.3%; grade 3+, 2.0%)



Axicabtagene ciloleucel and Tisagenlecleucel both approved for FL 3L+
Not approved for MZL (NCCN listed)

1. Neelapu et al. Blood (2024) 143:496-506 2. Dreyling et al. Blood (2024) 143:online before publication



Bispecifics CD3 x CD20 in patients with R/R iNHL

	Mosunetuzumab ¹ (RG7828)	Odronextamab ² (REGN1979)	Glofitamab ^{3*} (RG6026)	Epcoritamab ⁴ (GEN3013)
Patients	90	96	75	128
ORR	80%	81%	81%	82%
CR	60%	75%	69%	63%
PFS	17.9 m	20.2 m	Not reported	15.4 m

*Indolent NHL

Mosunetuzumab approved for FL 3L+
Epcoritamab approval expected 2024

Epcoritamab, subcutaneous for R/R FL: Evaluation of efficacy and safety

TRIAL DESIGN: PIVOTAL EPCORE™ NHL-1 STUDY

Dose escalation

B-NHL:

- ✓ No DLTs
- ✓ MTD not reached
- ✓ RP2D identified
- ✓ Manageable safety profile
- ✓ Encouraging antitumor activity

Key inclusion criteria:

- R/R CD20+ mature B-cell neoplasm
- ECOG PS 0–2
- ≥2 prior lines of antineoplastic therapy, including ≥1 anti-CD20 mAb
- Prior treatment with an alkylating agent or lenalidomide
- Measurable disease by PET/CT
- Prior CAR T allowed

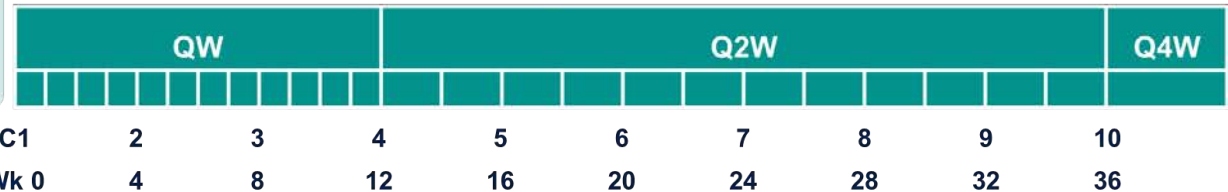
Data cutoff: April 21, 2023
Median follow-up: 17.4 mo

Dose expansion

Epcoritamab SC RP2D 48 mg
Treatment until PD^b or unacceptable toxicity
R/R FL 1-3A expansion cohort, N=128

SC injections in minutes

Step-up dosing^a



- **Primary endpoint:** ORR by independent review committee (IRC)
- **Key secondary endpoints:** MRD^c, DOR, TTR, PFS, OS, CR rate, and safety/tolerability



Patient characteristics and treatment history

Demographics	N=128
Median age, y (range)	65 (39–84)
Male, n (%)	79 (62)
Ann Arbor stage, n (%)	
I–II	19 (15)
III	32 (25)
IV	77 (60)
FLIPI, n (%) ^a	
0–1	17 (13)
2	31 (24)
3–5	78 (61)
Beta-2 microglobulin, n (%) ^b	
High	79 (62)
Normal	45 (35)

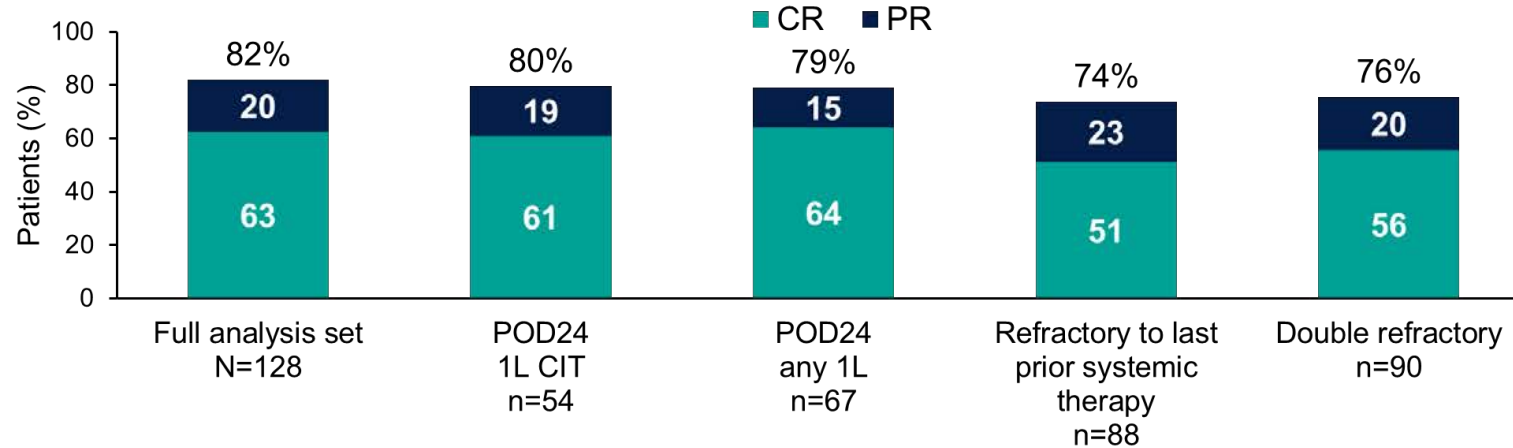
^aFLIPI was unknown for 1 patient and not applicable for 1 patient. FLIPI was prior to first dose on study. ^bBeta-2 microglobulin was missing for 4 patients.

Treatment History	N=128
Median time from diagnosis to first dose, y (range)	6.2 (0.2–35)
Median time from end of last line of therapy to first dose, mo (range)	5.2 (1–105)
Median number of prior lines of therapy (range)	3 (2–9)
≥3 prior lines, n (%)	81 (32)
≥4 prior lines, n (%)	40 (31)
POD24 – 1L CIT, ^a n (%)	54 (42)
POD24 – any 1L, ^b n (%)	67 (52)
Primary refractory, ^c n (%)	69 (54)
Refractory ^c to last prior systemic therapy, n (%)	88 (69)
Double refractory, ^{c,d} n (%)	90 (70)

^aProgression within 2 y of initiating first-line treatment that included chemoimmunotherapy. ^bProgression within 2 y of initiating any first-line treatment. ^cRefractory: No response or relapse within 6 mo after therapy. ^dDouble refractory: Refractory to both anti-CD20 and an alkylating agent, regardless of 2 treatments being in the same or different treatment lines.

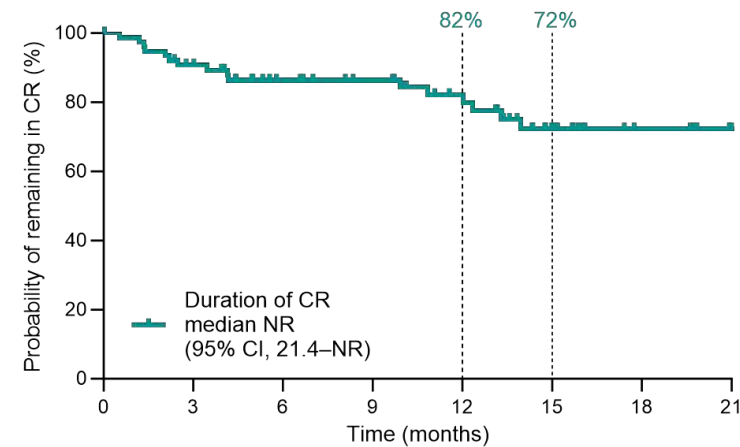
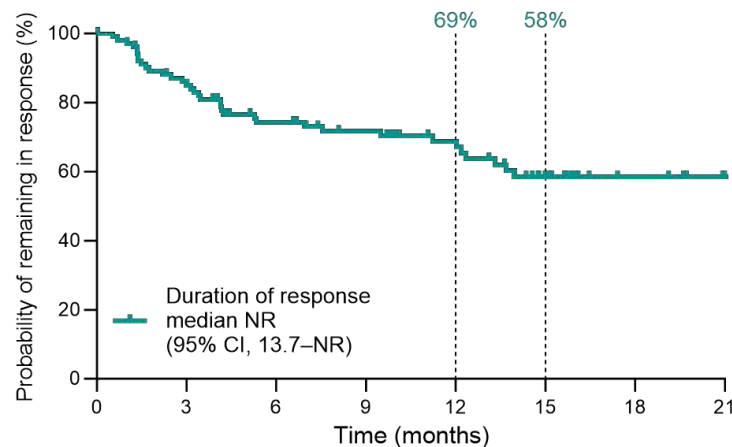
- Most patients had grade 2 (55%) or 3A (32%) FL
- All patients had prior treatment with an anti-CD20 mAb and an alkylating agent
 - Other prior systemic treatments included anthracyclines (77%), nucleotides (48%), topoisomerase inhibitors (36%), iMiDs (31%), PI3K inhibitors (23%), and CAR T-cell therapy (5%)

Epcoritamab for R/R FL: Efficacy



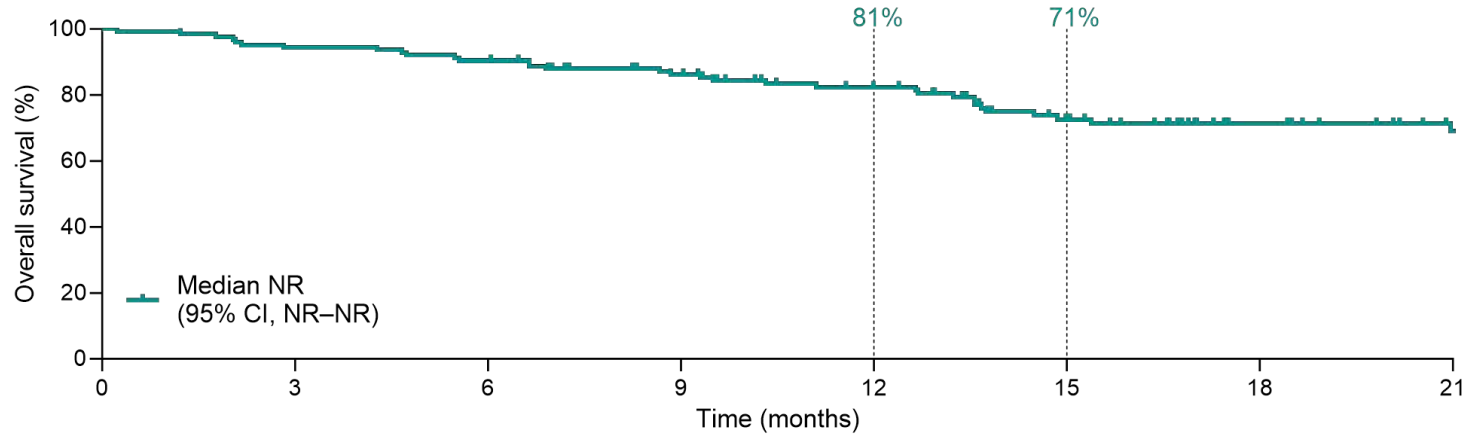
- Median time to response was 1.4 mo (range, 1.0–3.0)
- Median time to complete response was 1.5 mo (range, 1.2–11.1)
- Median time to next antilymphoma therapy was NR (range, 0.2+ to 30.0+)

Responses Were Deep and Durable



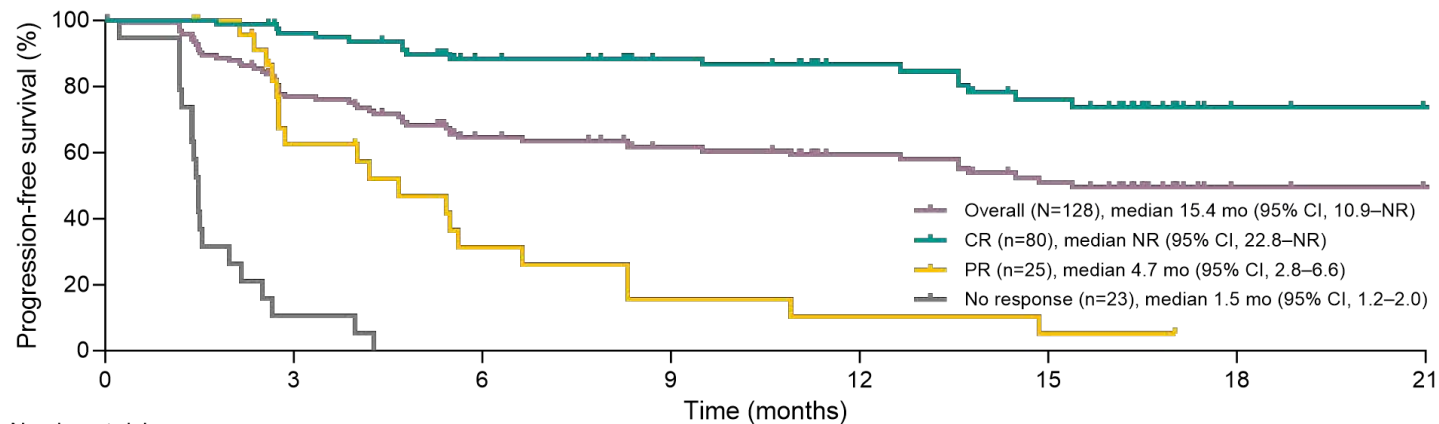
Epcoritamab for R/R FL: PFS and OS

Overall Survival



Of 100 MRD-evaluable patients, uMRD was achieved in 68 patients and correlated with improved PFS and OS

Progression-Free Survival Median NR in Complete Responders

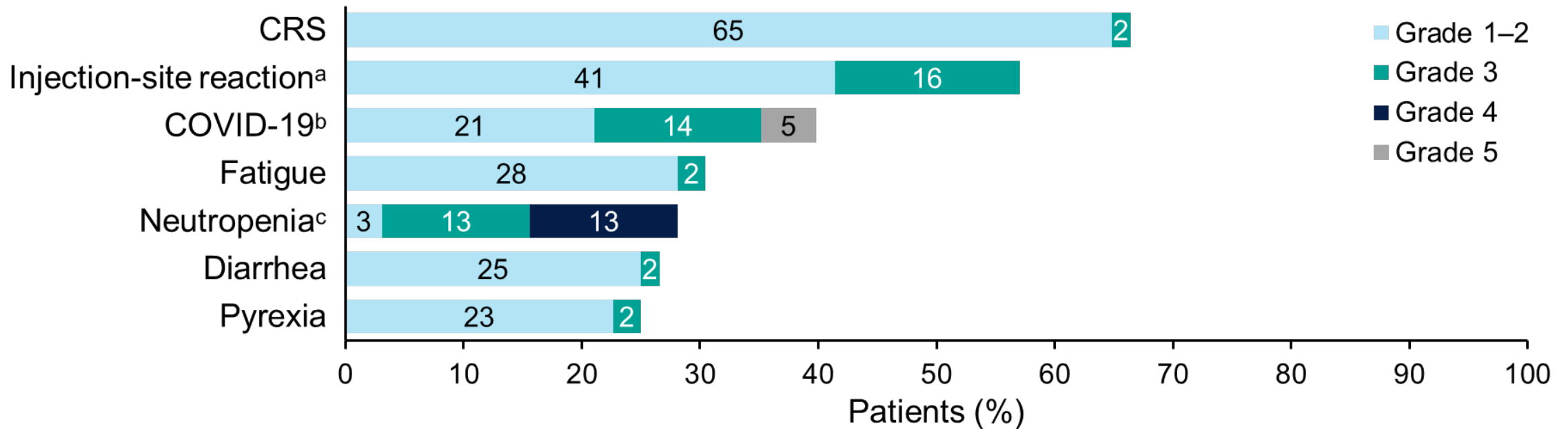


Number at risk

128	90	67	57	43	35	14	12
80	75	61	54	41	34	14	12
25	13	6	3	2	1	0	0
23	2	0	0	0	0	0	0

Epcoritamab for R/R FL: Safety

Common (>20%) Treatment-Emergent Adverse Events



^aCombined term includes injection-site reaction, erythema, inflammation, nodule, pain, pruritus, rash, and swelling. ^bCombined term includes COVID-19 and COVID-19 pneumonia. ^cCombined term includes neutropenia and neutrophil count decreased; 4 patients (3%) had febrile neutropenia (all grade 3).

- Safety profile consistent with previous reports
- TEAEs, grade ≥ 3 , occurred in 69% of patients, 38% of pts experience grade ≥ 3 related to Epcoritamab
- TEAEs led to discontinuation in 19% of patients
- **13 patients have fatal TEAEs**

Epcoritamab for R/R FL: Cycle 1 Optimization Reduced Risk and Severity of CRS

	Pivotal Cohort N=128	C1 Optimization Cohort ^b N=50
CRS, n (%) ^a	85 (66)	24 (48)
Grade 1	51 (40)	20 (40)
Grade 2	32 (25)	4 (8)
Grade 3	2 (2)	0
Median time to onset after first full dose, h (range)	15 (1–130)	60 (3–110)
Treated with tocilizumab, n (%)	31 (24)	5 (21)
Leading to epcoritamab SC discontinuation, n (%)	0	0
CRS resolution, n/n (%)	85/85 (100)	24/24 (100)
Median time to resolution, d (range)	2 (1–54)	3 (1–14)

^aGraded by Lee et al 2019 criteria.¹³^bData cutoff: September 21, 2023. Median follow-up: 3.8 mo (range, 1.9–8.7).



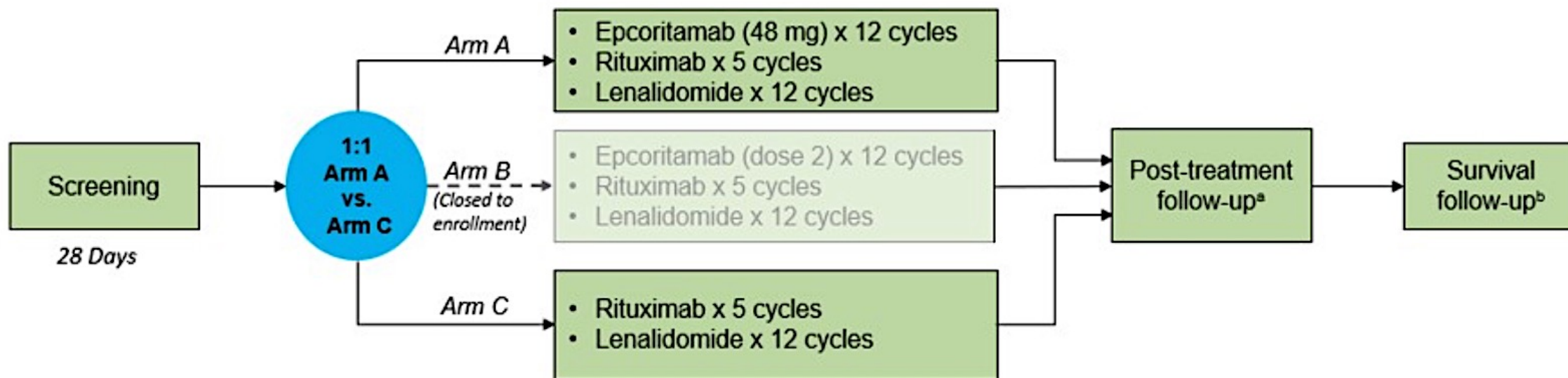
Epcoritamab for R/R FL: Safety

- Safety profile was manageable in the pivotal cohort; further substantial reduction in risk and severity of CRS was observed with C1 optimization and compares favorably to other CD3 x CD20 bispecific antibodies in FL
- In both cohorts, CRS was most common following the first full dose in C1
- Comparable efficacy was observed with C1 optimization

ICANS, TLS, COVID-19

- No cases of ICANS with C1 optimization
- In the pivotal cohort, ICANS occurred in 8 pts, all grade 1-2 and resolved with no treatment discontinuation
- No clinical TLS
- COVID-19 impacted the trials with increased incidence of all grades of COVID-19 infection leading to higher-than-expected treatment discontinuations
 - 50% of treatment discontinuations and 46% of fatal TEAEs were due to COVID-19

EPCORE FL-1: Ongoing Phase III Trial of Epcoritamab with Rituximab and Lenalidomide (R²) versus R² Alone in R/R FL



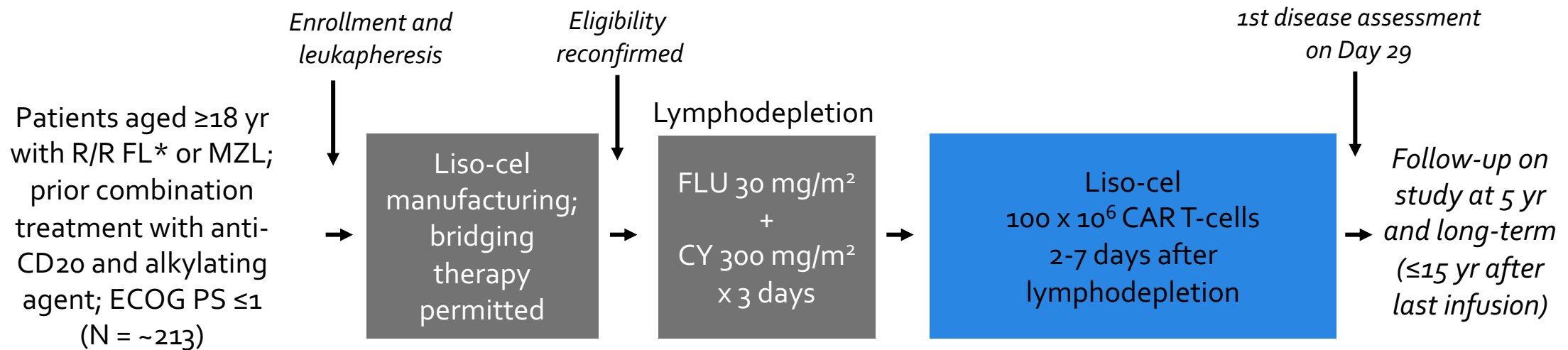
After initial step-up dosing during cycle 1, epcoritamab will be administered weekly in cycles 2-3, then Q4W in cycles 4-12.

^aPatients who complete treatment or discontinue treatment for reasons other than disease progression will proceed to post-treatment follow-up.

^bPatients who have confirmed disease progression, initiate another line of treatment for FL, or refuse post-treatment follow-up visits will proceed to survival follow-up. Q4W, every 4 weeks.

TRANSCEND FL: Study Design

- Multicenter, open-label, single-arm, phase II trial; data cutoff January 27, 2023



*High-risk features required for 2L patients: POD24 (progression ≤ 24 mo of diagnosis and after anti-CD20/alkylating agent therapy within 6 mo) or ≥ 1 mGELF criteria (FL-related symptoms, threatened end-organ function, cytopenia that is secondary to lymphoma or bulky disease, splenomegaly, or stable progression over ≥ 6 mo).

Primary endpoint: IRC-assessed ORR via PET/CT (Lugano 2014 criteria)

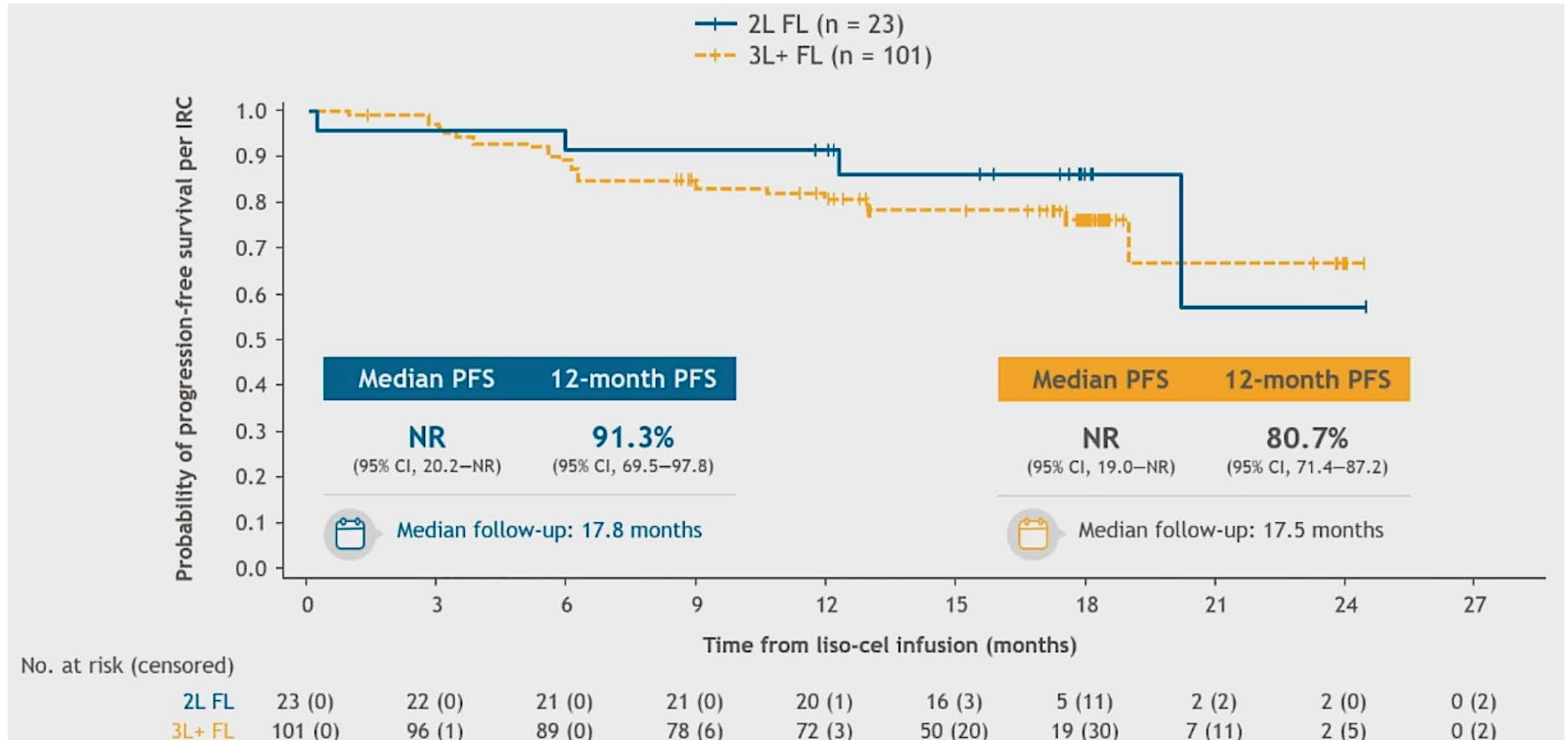
Key secondary endpoints: CRR, DoR, CR DoR, PFS, OS, safety

TRANSCEND FL: Patient characteristics

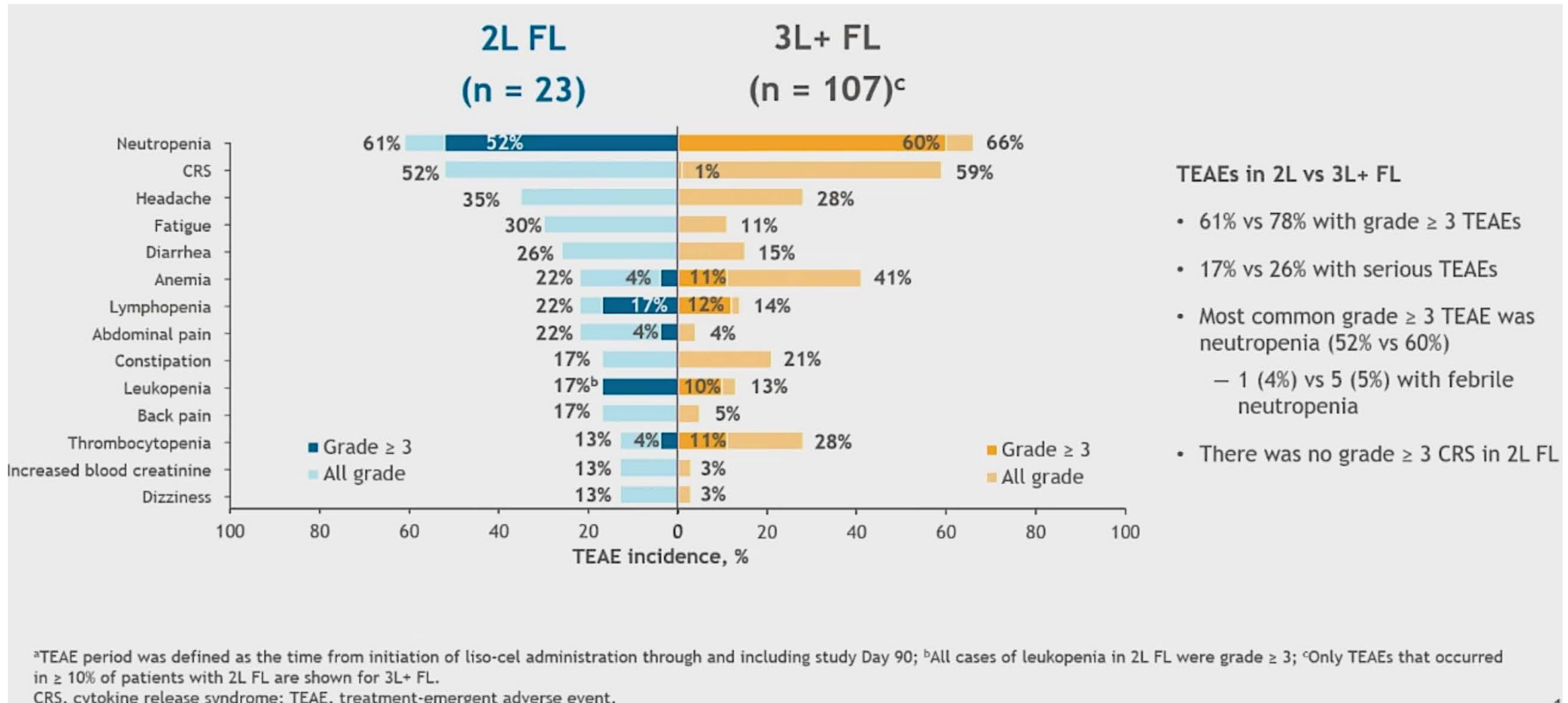
	2L FL (n = 23)	3L+ FL (n = 107)
Median (range) age, y	53 (34–69)	62 (23–80)
Male, n (%)	17 (74)	66 (62)
FL grade 1 or 2 / 3a at screening, ^a n (%)	17 (74) / 6 (26)	81 (76) / 25 (23)
Ann Arbor stage at screening, n (%)		
Stage I/II	6 (26)	12 (11)
Stage III/IV	17 (74)	95 (89)
FL International Prognostic Index at screening, n (%)		
Low risk (0–1) / intermediate risk (2)	11 (48) / 4 (17)	12 (11) / 34 (32)
High risk (3–5)	8 (35)	61 (57)
LDH > ULN before lymphodepletion, n (%)	6 (26)	47 (44)
Met mGELF criteria at most recent relapse, n (%)	16 (70)	57 (53)
Symptoms attributable to FL	6 (26)	13 (12)
Threatened end-organ function/cytopenia secondary to lymphoma/bulky disease	7 (30)	24 (22)
Splenomegaly	0	4 (4)
Steady progression over at least 6 months	3 (13)	16 (15)
Median (range) prior lines of systemic therapy	1 (1–1)	3 (2–10)
Prior HSCT, n (%)	0	33 (31)
Received prior rituximab and lenalidomide, n (%)	0	23 (21)
Refractory to last systemic therapy, ^b n (%)	15 (65)	72 (67)
Double refractory (anti-CD20 and alkylator), ^c n (%)	11 (48)	69 (64)
POD24 from initial immunochemotherapy, n (%)	15 (65)	58 (54)
POD24 from diagnosis, n (%)	12 (52)	46 (43)
Received bridging therapy, n (%)	5 (22)	44 (41)



TRANSCEND FL: Progression-free survival per IRC in efficacy set



TRANSCEND FL: Most common TEAEs (>10%) in liso-cel-treated set



TRANSCEND FL: Summary

- This is the first report of outcomes in patients with 2L high-risk R/R FL who received CD19-directed CAR T cell therapy
- Although population size was small, a single administration of liso-cel achieved very high CR rate with follow-up ongoing
 - Primary and key secondary endpoints were met with an ORR of 96% and CR rate of 96%, respectively
 - On-study median follow-up was 18.9 months; median was not reached for DOR, PFS, and OS
 - 12-month estimates for DOR, PFS, and OS were 90%, 91%, and 96%, respectively
- Lisocabtagene maraleucel demonstrated a manageable safety profile in patients with 2L R/R FL, with no grade ≥ 3 CRS or infections and low rates of NEs and prolonged cytopenia
- These data support lisocabtagene maraleucel as a potential new treatment option in patients with 2L R/R FL at high risk for treatment failure

FDA Grants Accelerated Approval to Zanubrutinib for Relapsed or Refractory Follicular Lymphoma

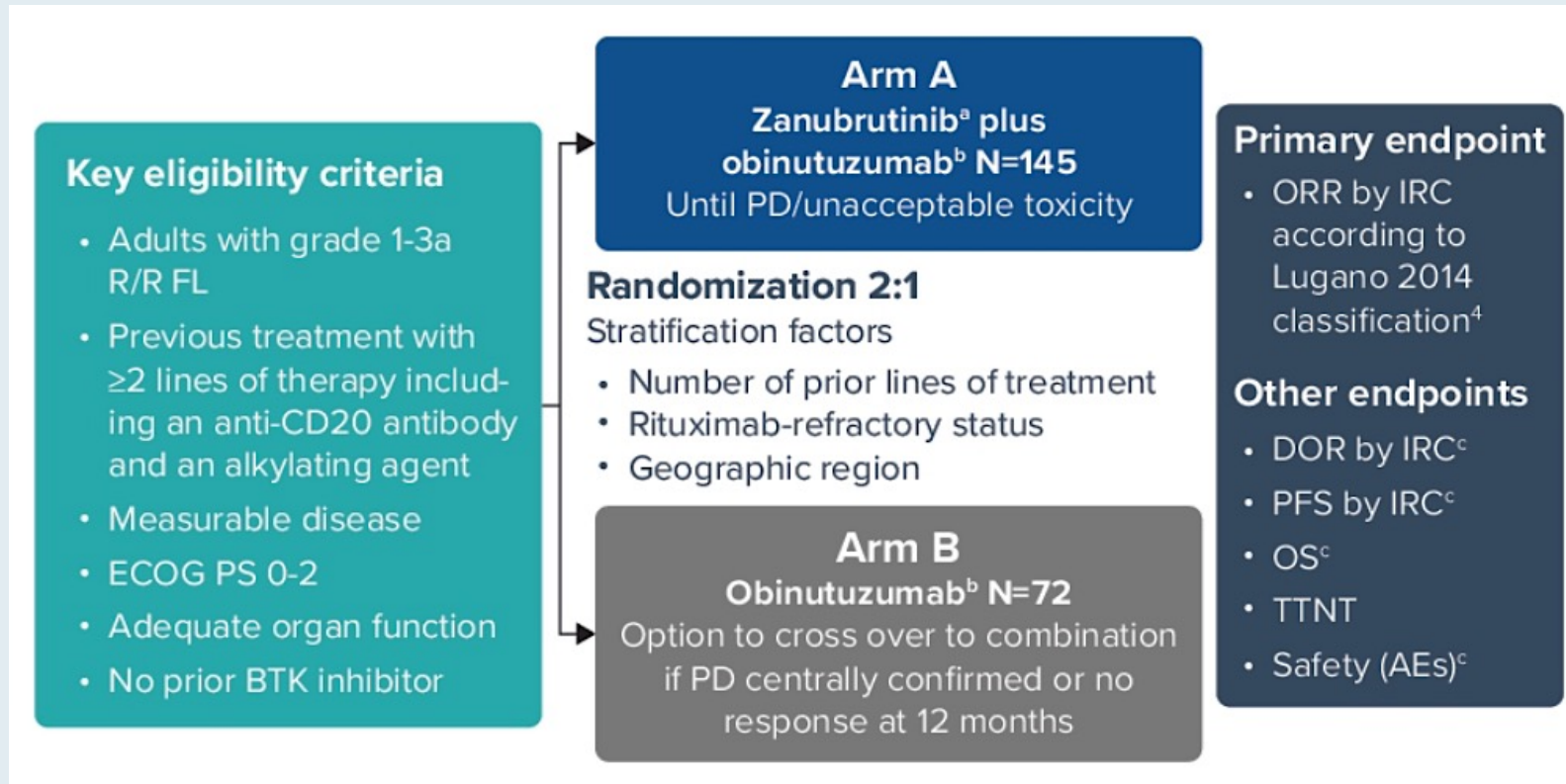
Press Release: March 7, 2024

“On March 7, 2024, the Food and Drug Administration granted accelerated approval to zanubrutinib with obinutuzumab for relapsed or refractory follicular lymphoma (FL) after two or more lines of systemic therapy. The regimen was evaluated in Study BGB-3111-212 (ROSEWOOD; NCT03332017), an open-label, multicenter, randomized trial that enrolled 217 adult patients with relapsed or refractory FL after at least 2 prior systemic treatments.

Patients were randomized (2:1) to receive either zanubrutinib 160 mg orally twice daily until disease progression or unacceptable toxicity plus obinutuzumab (ZO), or obinutuzumab alone. The median number of prior lines of therapy was 3 (range 2-11).

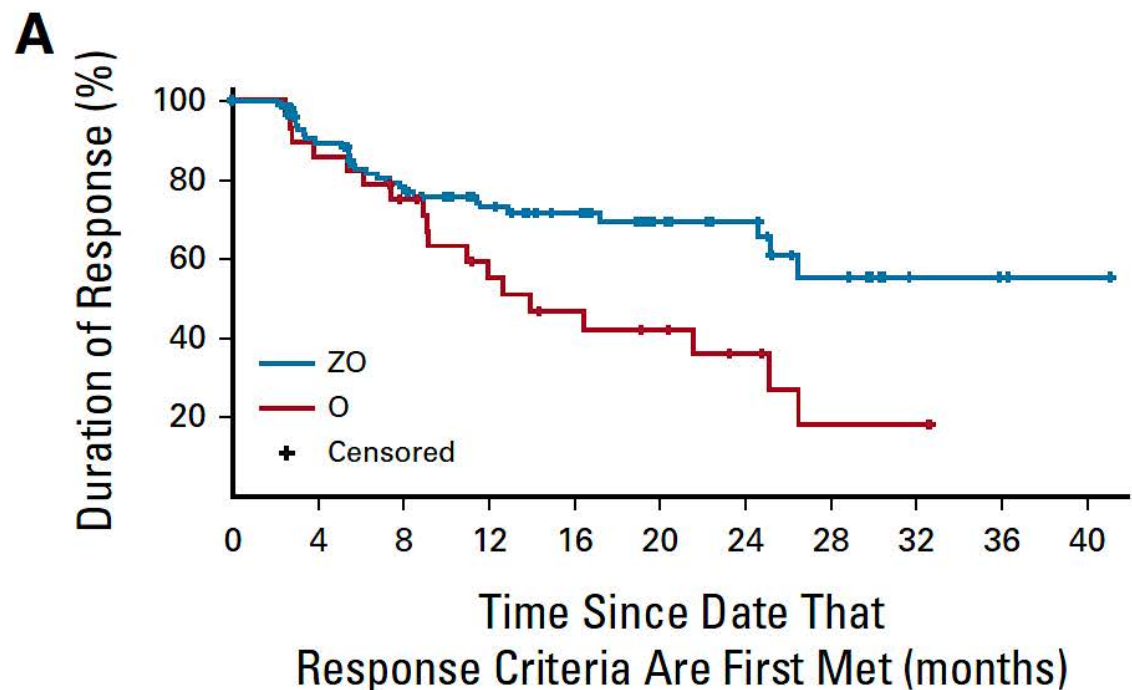
ORR was 69% (95% CI: 61, 76) in the ZO arm and 46% (95% CI: 34, 58) in the obinutuzumab arm (two-sided p-value, 0.0012). With a median follow-up of 19.0 months, the median DOR was not reached in the ZO arm (95% CI: 25.3 months, NE) and was 14.0 months (95% CI: 9.2, 25.1) for those patients receiving obinutuzumab monotherapy.”

ROSEWOOD: Phase II Randomized Study of Zanubrutinib plus Obinutuzumab versus Obinutuzumab Monotherapy



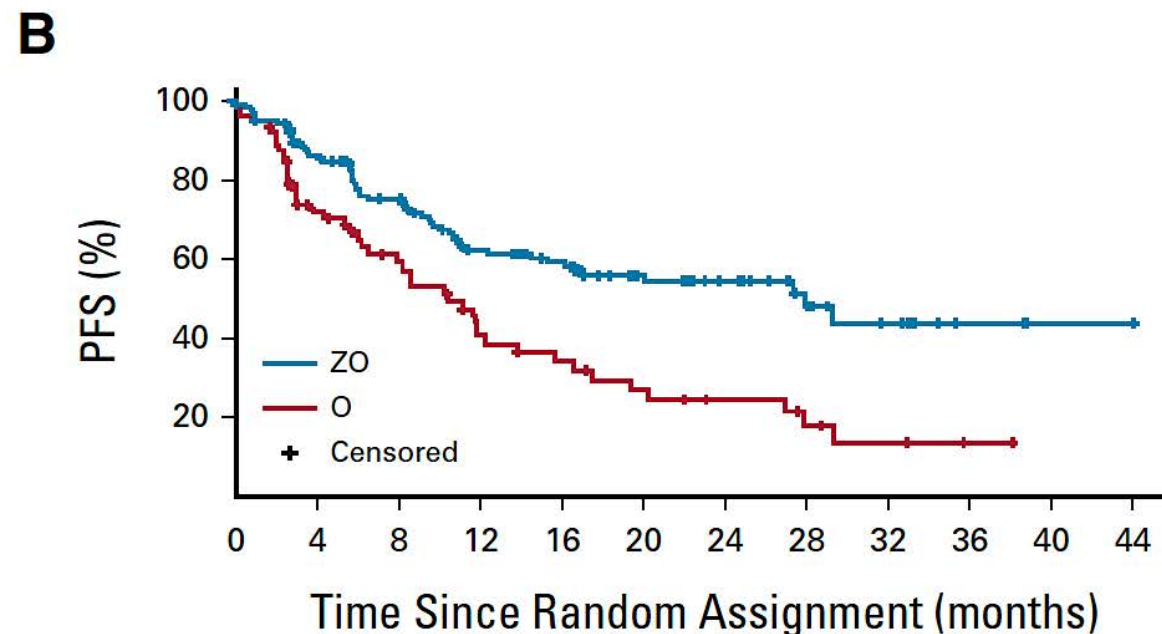
End Point	ZO (n = 145)	O (n = 72)	HR (95% CI)	Two-Sided P Value
ORR by ICR, % (95% CI)	69 (61 to 76)	46 (34 to 58)	—	.001
CR, No. (%)	57 (39)	14 (19)	—	.004
PR, No. (%)	43 (30)	19 (26)	—	—

ROSEWOOD: DOR and PFS



No. at risk:

Time (months)	0	4	8	12	16	20	24	28	32	36	40											
ZO	100	97	82	73	68	59	51	43	40	33	23	21	19	12	10	7	3	3	2	1	1	0
O	33	29	24	23	20	16	13	11	10	9	8	6	5	3	2	2	2	0				



No. at risk:

Time (months)	0	4	8	12	16	20	24	28	32	36	40	44											
ZO	145	135	116	96	92	79	67	62	56	45	38	35	25	22	15	10	9	5	3	3	1	1	0
O	72	63	42	34	30	27	19	16	15	12	11	9	8	8	5	3	3	2	1	1	0		

End Point	ZO (n = 145)	O (n = 72)	HR (95% CI)	Two-Sided P Value
DOR by ICR, months, median (95% CI)	NE (25.3 to NE)	14.0 (9.2 to 25.1)	—	—
18-month rate, %	69 (58 to 78)	42 (23 to 60)	—	—
Duration of CR by ICR, months, median (95% CI)	NE (26.5 to NE)	26.5 (2.7 to NE)	—	—
18-month rate, % (95% CI)	87 (74 to 94)	51 (21 to 75)	—	—
PFS by ICR, months, median (95% CI)	28.0 (16.1 to NE)	10.4 (6.5 to 13.8)	0.50 (0.33 to 0.75)	<.001

ROSEWOOD: Safety

TABLE 3. Any Grade (>10% of patients) and Grade ≥3 (>5% of patients) TEAEs in the Safety Population

Adverse Event	ZO (n = 143)		O (n = 71)	
	Any Grade, No. (%)	Grade ≥3, No. (%)	Any Grade, No. (%)	Grade ≥3, No. (%)
≥1 TEAE	135 (94)	90 (63)	64 (90)	34 (48)
Thrombocytopenia ^a	51 (36)	22 (15)	17 (24)	5 (7)
Neutropenia ^b	42 (29)	35 (24)	20 (28)	16 (23)
Diarrhea	26 (18)	4 (3)	12 (17)	1 (1)
Fatigue	22 (15)	0 (0)	10 (14)	1 (1)
Constipation	19 (13)	0 (0)	6 (8)	0 (0)
Pyrexia	19 (13)	0 (0)	14 (20)	0 (0)
Cough	18 (13)	0 (0)	9 (13)	0 (0)
Pneumonia	17 (12)	14 (10)	5 (7)	3 (4)
Asthenia	17 (12)	1 (1)	6 (8)	0 (0)
Dyspnea	16 (11)	3 (2)	7 (10)	0 (0)
Back pain	15 (10)	1 (1)	4 (6)	1 (1)
Anemia	16 (11)	7 (5)	7 (10)	4 (6)
COVID-19	14 (10)	8 (6)	7 (10)	2 (3)

Agenda

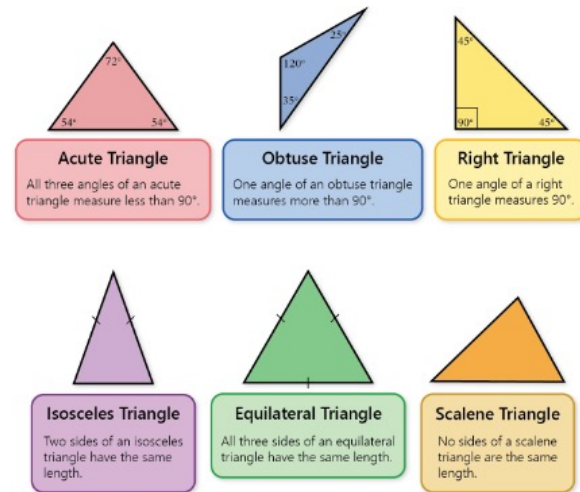
Module 1: Follicular Lymphoma (FL) — Dr Zelenetz

Module 2: Mantle Cell Lymphoma (MCL) — Dr Lunning

Module 3: Hodgkin Lymphoma (HL) — Dr LaCasce

Module 4: Diffuse Large B-Cell Lymphoma (DLBCL) — Dr Maddocks

Mantle Cell Lymphoma: Many Different Triangles



Matthew Lunning D.O. FACP
Associate Professor
University of Nebraska Medical Center



Disclosures

Consulting Agreements	AbbVie Inc, AstraZeneca Pharmaceuticals LP, Bristol Myers Squibb, Caribou Biosciences Inc, Daiichi Sankyo Inc, Fate Therapeutics, Genentech, a member of the Roche Group, Genmab US Inc, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, Kite, A Gilead Company, Loxo Oncology Inc, a wholly owned subsidiary of Eli Lilly & Company, Nurix Therapeutics Inc, Recordati, Regeneron Pharmaceuticals Inc, Seagen Inc, Takeda Pharmaceuticals USA Inc
Research Support	Bristol Myers Squibb, Fate Therapeutics, Sana Biotechnology



Case

A 61-year-old man presented with fatigue and a possible non-reducible inguinal hernia making it difficult during calving season

PMH: Hypertension, DM2, and HLP

PE: ECOG 1. Left inguinal solid immobile mass measuring 3 X 3 cm; scattered adenopathy in cervical and axillary regions measuring 1-2 cm

Labs: CBC with normocytic anemia, CMP normal, LDH elevated

Excisional Biopsy of mass: Atypical lymphoid population with areas of blastoid features

– IHC: CD20+, CD5+, cyclin D1+, Sox-11+, Ki67 50%

FISH: Translocations involving t(11:14); del(17p) NOT seen

Molecular: Positive for TP53 mutation

PET-CT: Multiple enlarged in mesenteric and retroperitoneal nodes, largest 5.3 x 3.1 cm

Bone marrow biopsy: Hypercellular (50%) with 20% involved with atypical lymphoid aggregates expressing CD20, CD5



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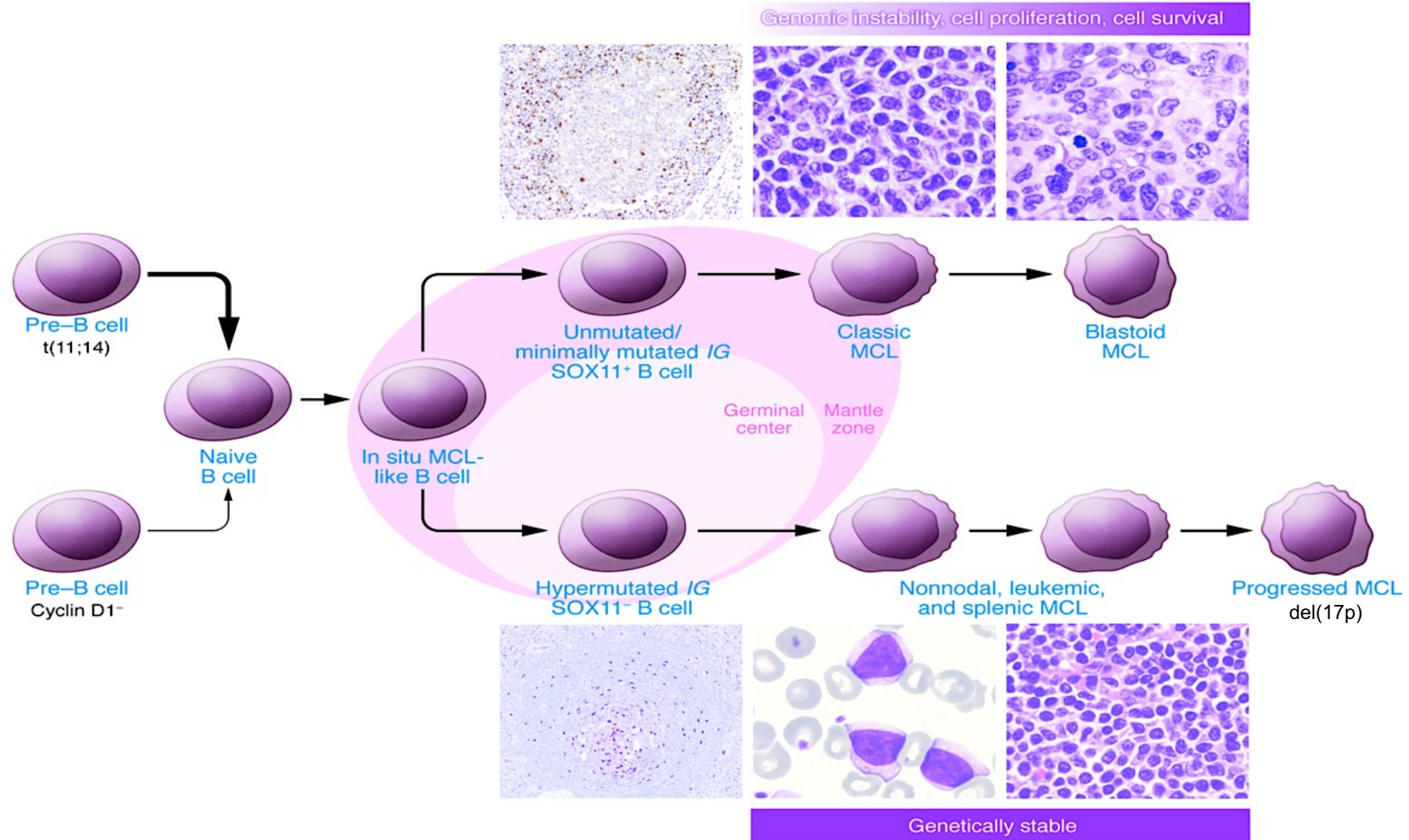
PET-CT: Multiple enlarged in mesenteric and retroperitoneal nodes, largest 5.3 x 3.1 cm

Bone marrow biopsy: 20% involved with atypical lymphoid aggregates expressing CD20, CD5

Impression: Stage IVA (TP53 mutated) Mantle Cell lymphoma, bMIPI High risk

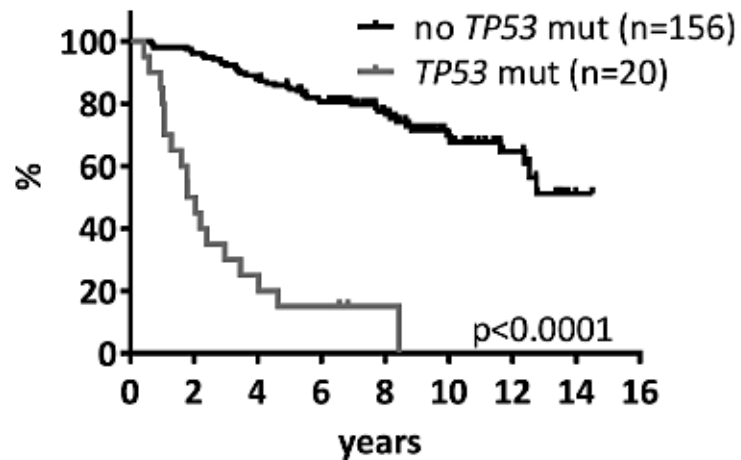


MCL Pathogenesis

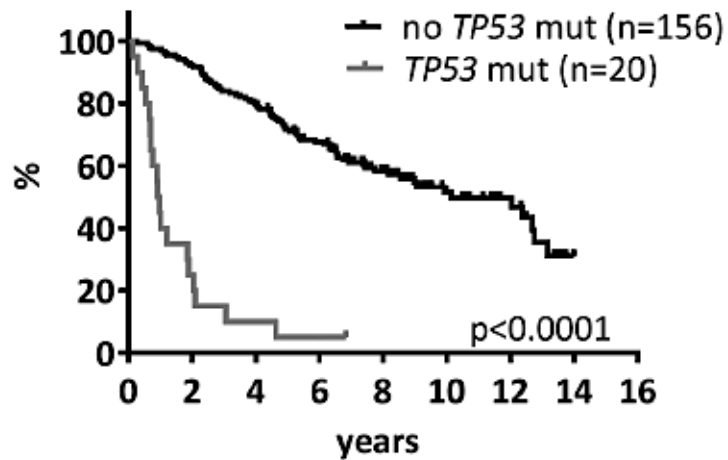


TP53 Mutated MCL = BAD

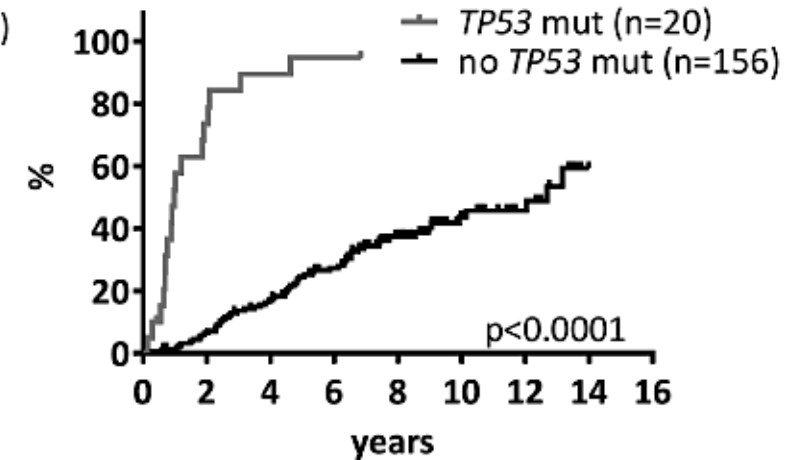
OS



PFS



CIR

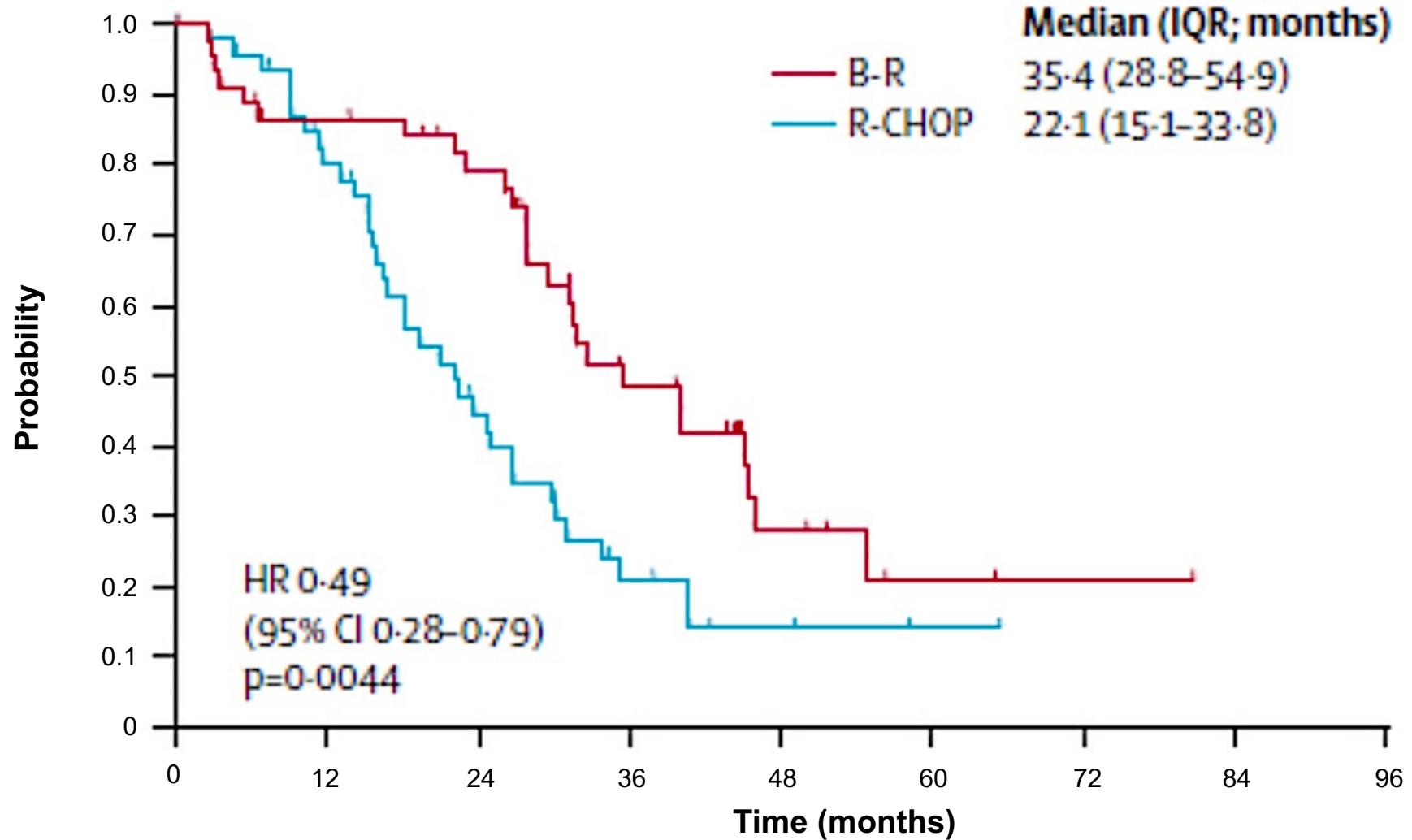


Median PFS = 1.8 years
= 0.9 years

Median OS

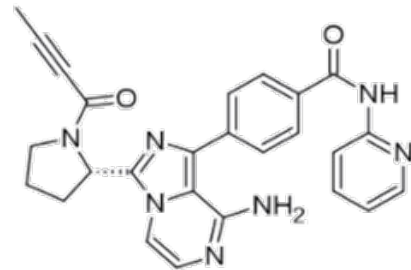


Most Give BR

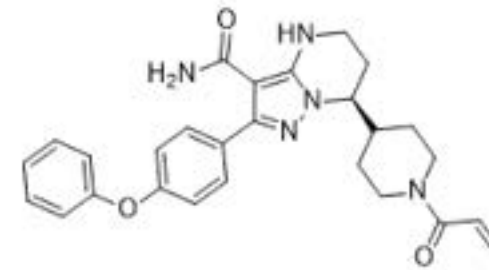


2nd Generation BTKi

Acalabrutinib

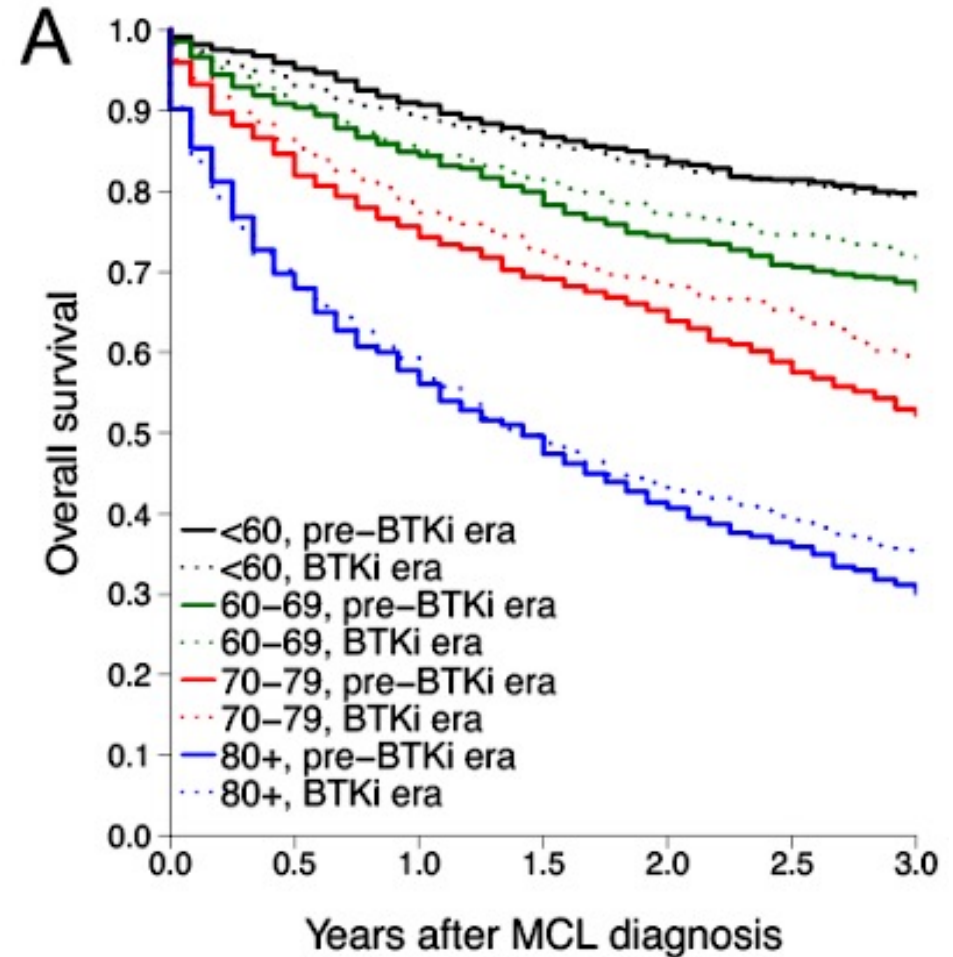


Zanubrutinib



Survival of MCL

	3-year all-cause mortality		3-year mortality from MCL	
	Rate, %	HR (95% CI)	Rate, %	Sub-HR (95% CI)
Overall	39.8		27.3	
<60, pre-BTKi era	20.5	1.00	17.3	1.00
<60, BTKi era	21.0	1.04 (0.82, 1.31)	14.3	0.80 (0.62, 1.04)
60-69, pre-BTKi era	32.3	1.00	24.0	1.00
60-69, BTKi era	28.4	0.85 (0.72, 1.00)	19.5	0.78 (0.64, 0.94)
70-79, pre-BTKi era	47.8	1.00	33.9	1.00
70-79, BTKi era	40.4	0.80 (0.70, 0.92)	27.5	0.76 (0.65, 0.90)
>=80, pre-BTKi era	69.9	1.00	46.5	1.00
>=80, BTKi era	65.8	0.91 (0.80, 1.04)	42.2	0.87 (0.75, 1.02)

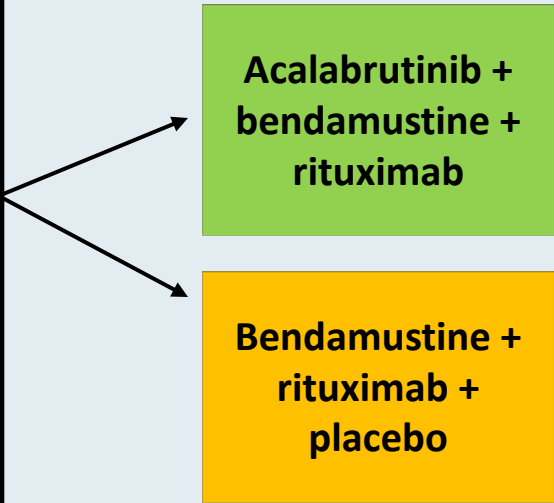


Emerging Trials: Front Line

ECHO

Clinical trial identifier: NCT02972840

- ≥65 years of age
- MCL with documentation of a chromosome translocation (11;14)(q13;q32) and/or overexpression of cyclin D1 in association with other relevant markers (eg, CD5, CD19, CD20, PAX5)
- No prior systemic therapy

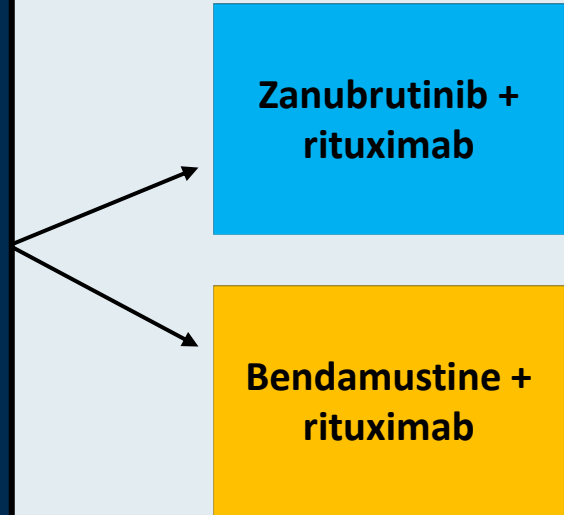


Primary endpoint: PFS

MANGROVE

Clinical trial identifier: NCT04002297

- ≥70 years OR ≥60 and <70 years ineligible for transplant
- No prior systemic treatment for MCL
- ECOG PS 0-2
- Adequate marrow and organ function



Primary endpoint: PFS

Emerging Trials: Front Line (Continued)

ECOG-4181

Clinical trial identifier: NCT04115631

- ECOG PS 0-2
- MIPI score must be calculated/reported
- Previously untreated MCL with cyclin D1 (Bcl-1) expression by IHC and/or t(11;14) by cytogenetics or FISH

Bendamustine + rituximab + cytarabine

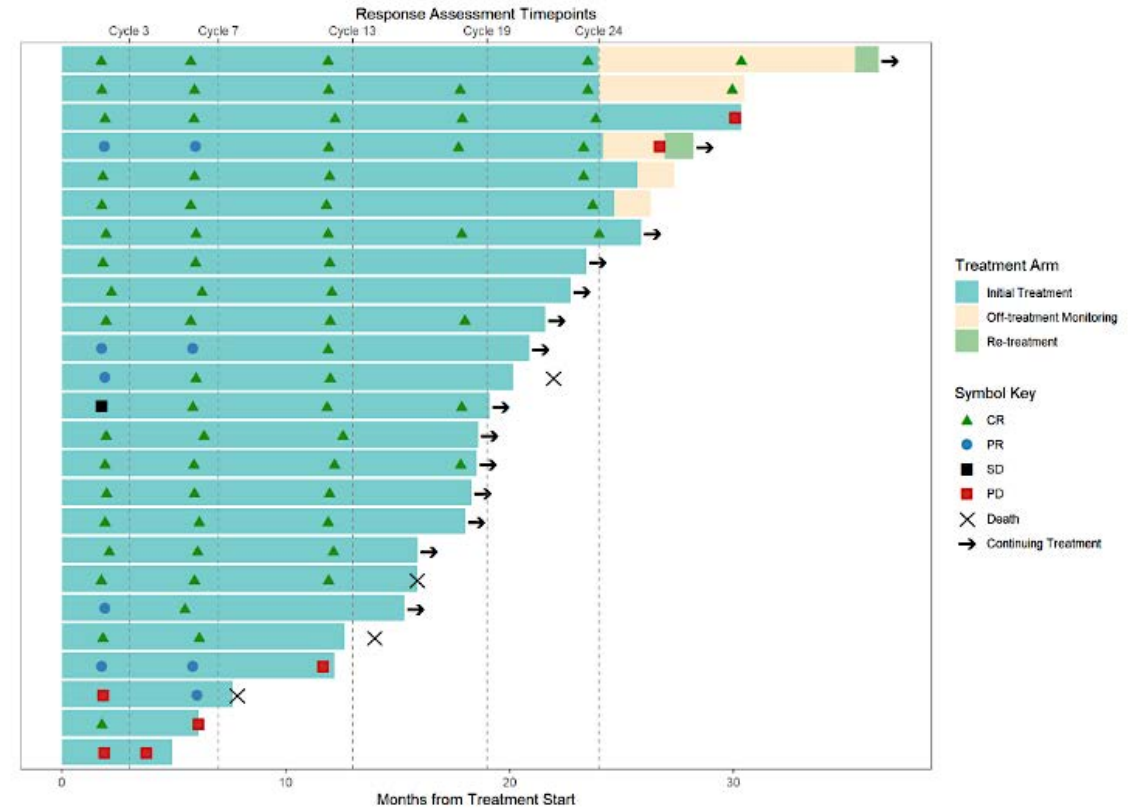
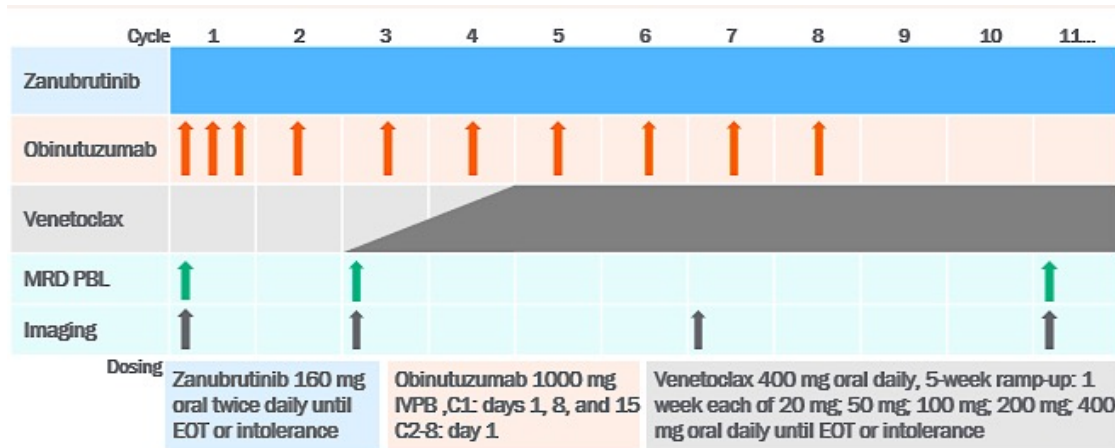
Acalabrutinib + bendamustine
+ rituximab + cytarabine

Acalabrutinib + bendamustine + rituximab

Progressive disease or
toxicity

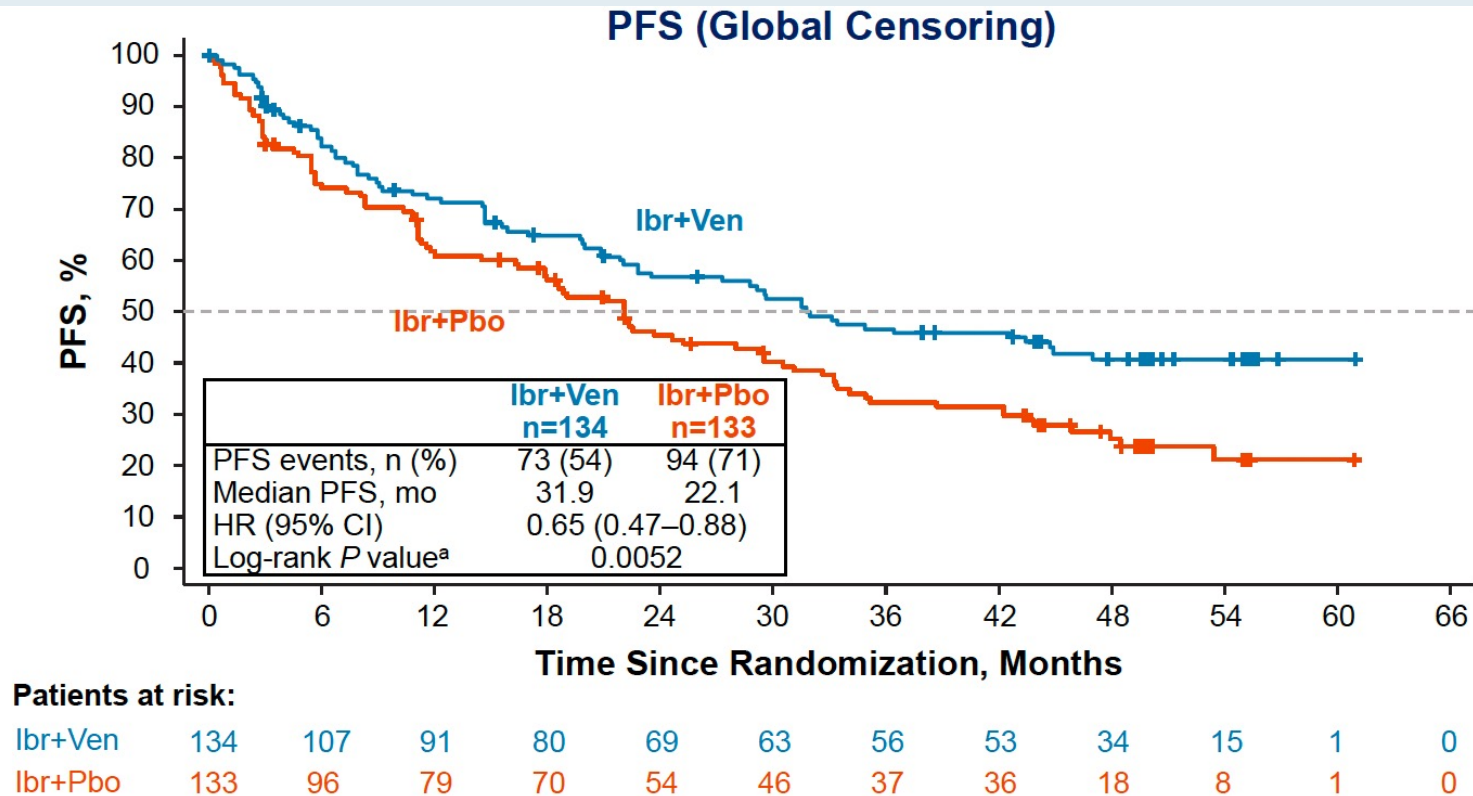
Primary endpoint: Composite complete response by PET/CT and minimal residual disease negativity rate in peripheral blood

BOVen: TP53 Mutated MCL



Phase III SYMPATICO Trial: Ibrutinib + Venetoclax for Relapsed/Refractory MCL

- CR rate and TTNT were also significantly improved with Ibr + Ven
- OS was numerically improved

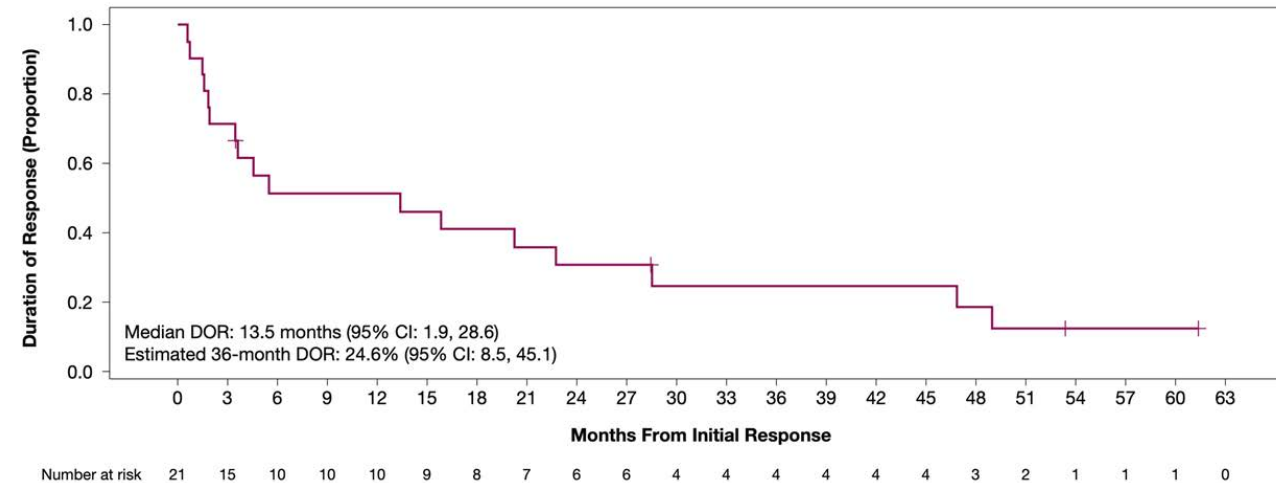


Median PFS, mo	Global Censoring ^b				US FDA Censoring ^c			
	Ibr+Ven n=134	Ibr+Pbo n=133	HR (95% CI)	Log-rank P value ^a	Ibr+Ven n=134	Ibr+Pbo n=133	HR (95% CI)	Log-rank P value ^a
Investigator assessment	31.9	22.1	0.65 (0.47–0.88)	0.0052	42.6	22.1	0.60 (0.44–0.83)	0.0021
IRC assessment	31.8	20.9	0.67 (0.49–0.91)	0.0108	43.5	22.1	0.63 (0.45–0.87)	0.0057

CR = complete response; TTNT = time to next treatment; OS = overall survival; IRC = independent review committee

Rel/Ref MCL: Acala

	Blastoid/ Pleomorphic MCL (n=26)	All Pts (N=124)
ORR (CR + PR), %	81	81
CR, %	39	48
Median DOR, mo	13.5	29
Median PFS, mo	15.2	22
Median OS, mo	36.3	59



A Fib

- Any grade, n=3 (2.4%)
- Grade 3/4, n=0

Hypertension

- Any grade, n=5 (4.0%)
- Grade 3/4, n=2 (1.6%)

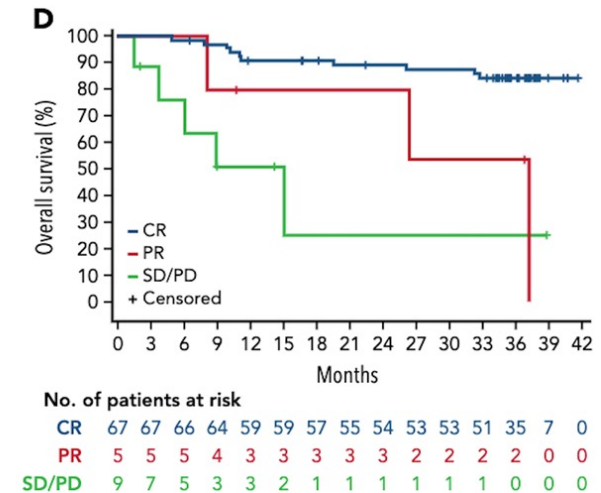
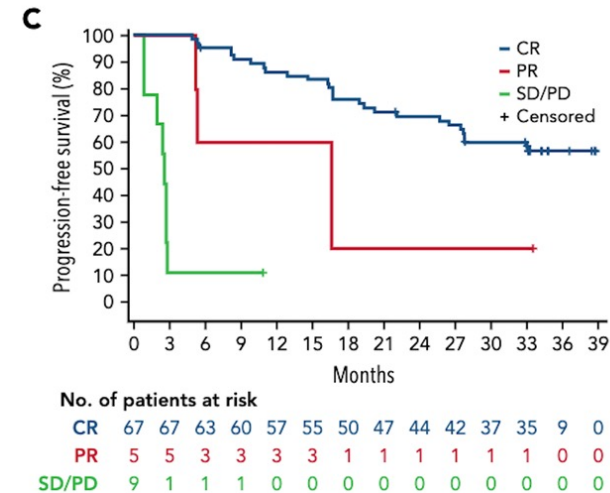
Hemorrhage

- Any grade, n=46 (37.1%)
- Grade 3/4, n=5 (4.0%)

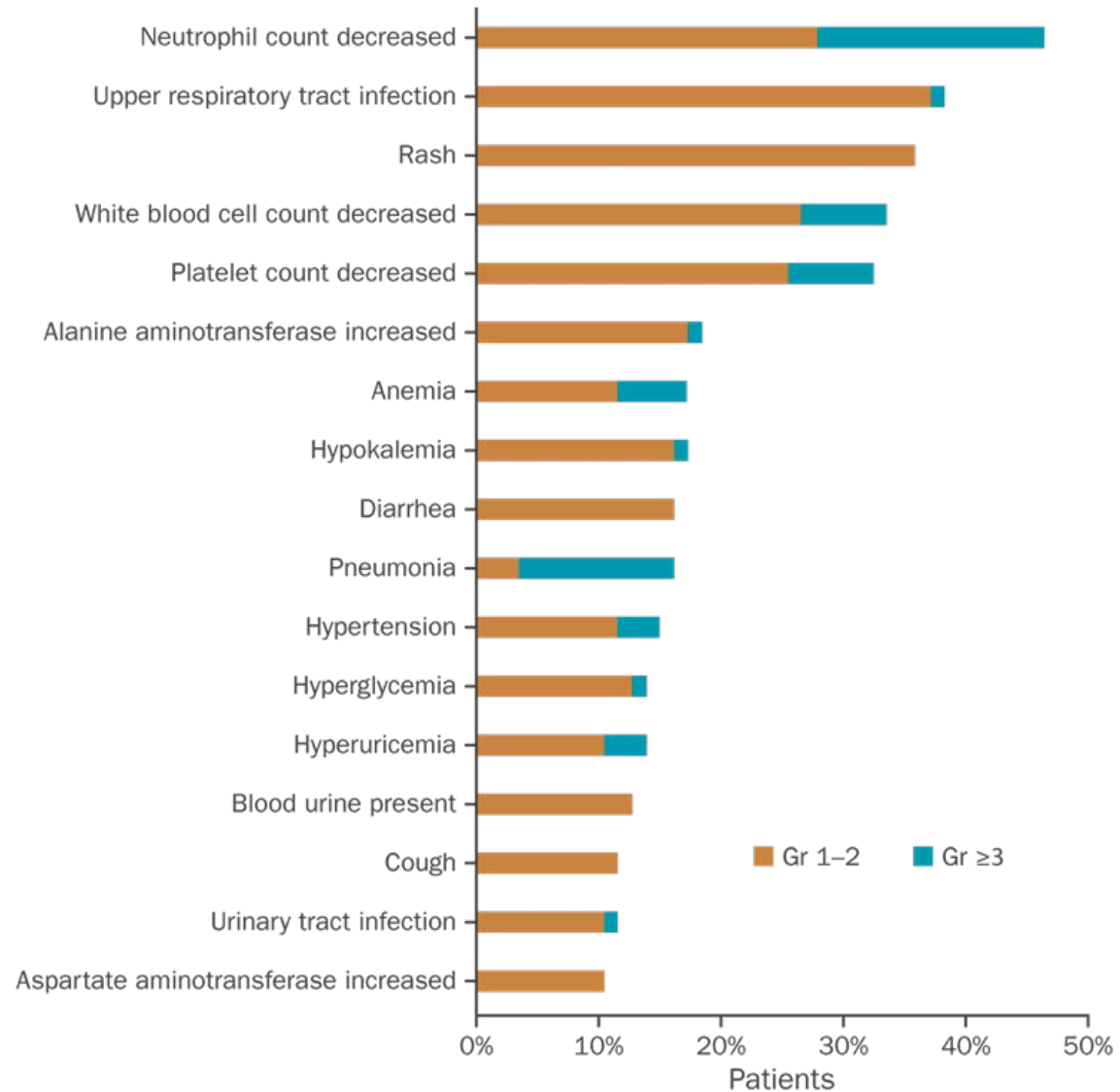


Rel/Ref MCL: Zanu

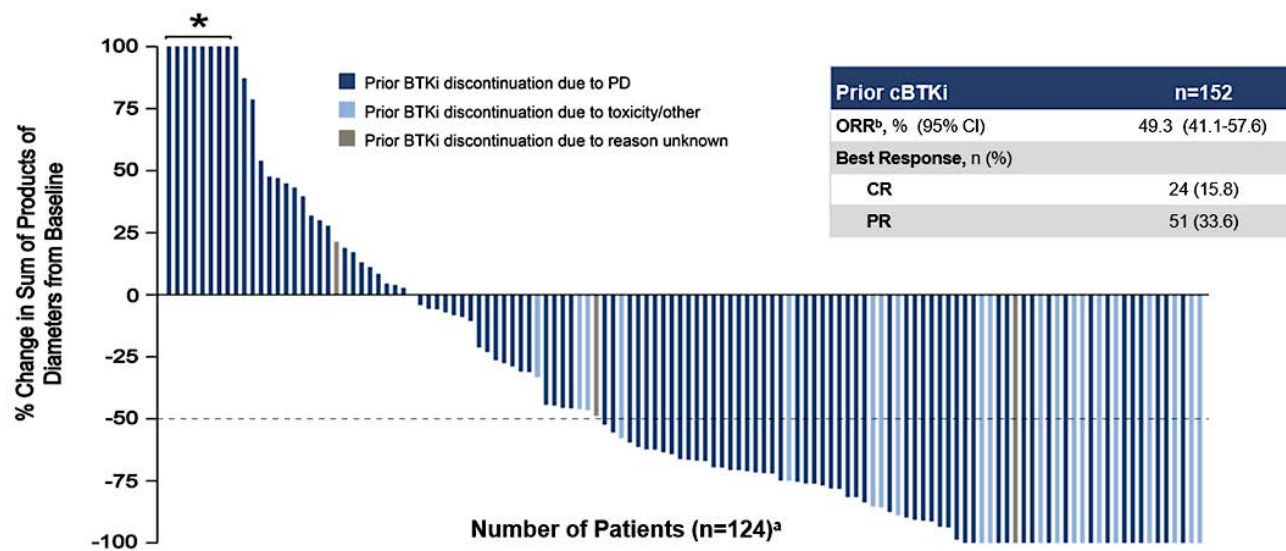
N=86	
ORR (CR+PR), % (95% CI)	83.7 (74.2-90.8)
Best response, n (%)	
CR	67 (77.9)
PR	5 (5.8)
Median follow-up, mo	30.6
Median DOR, mo (95% CI)	NR (24.9-NE)
Median PFS, mo (95% CI)	33.0 (19.4-NE)
36-month PFS, % (95% CI)	47.6 (36.2-58.1)
36-month OS, % (95% CI)	74.8 (63.7-83.0)



Rel/Ref MCL: Zanu

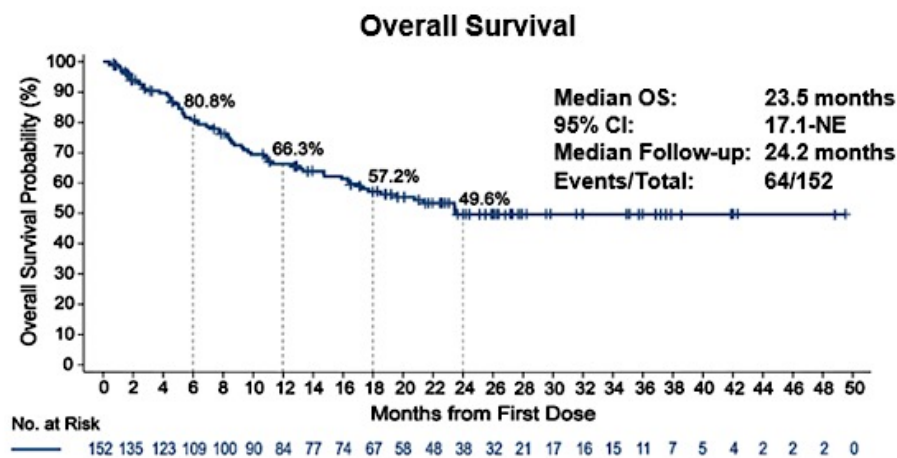
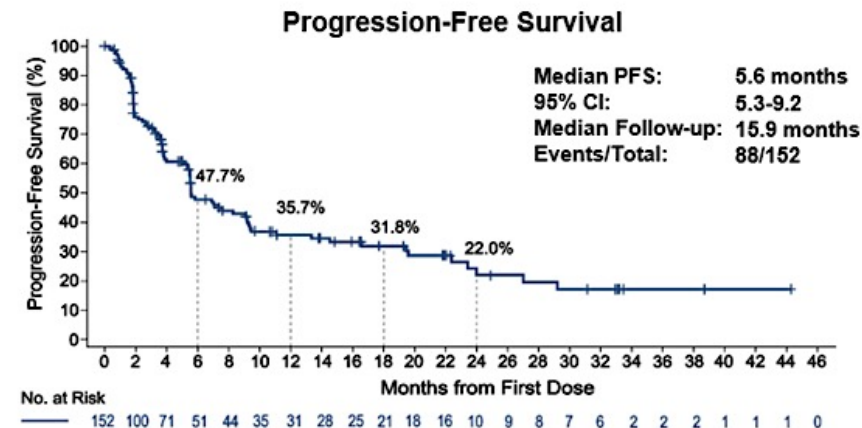


Rel/Ref MCL: Pirtobrutinib in Pts with Prior cBTKi

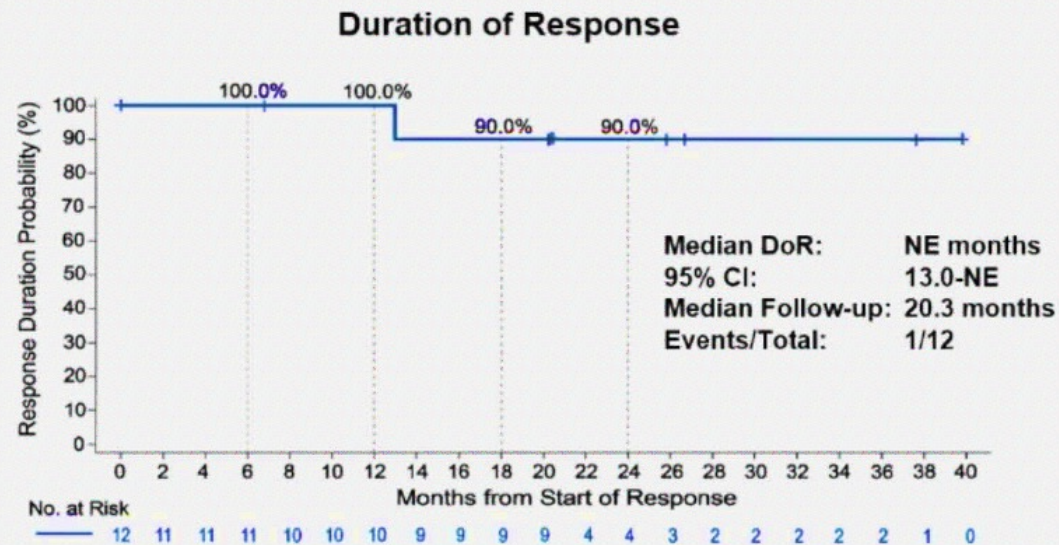


Median Time to First Response was 1.8 months (range: 0.8-13.8)

- Pirtobrutinib also demonstrated anti-tumor activity in patients with prior cBTKi and high-risk molecular features including high Ki-67 expression and TP53 mutations.

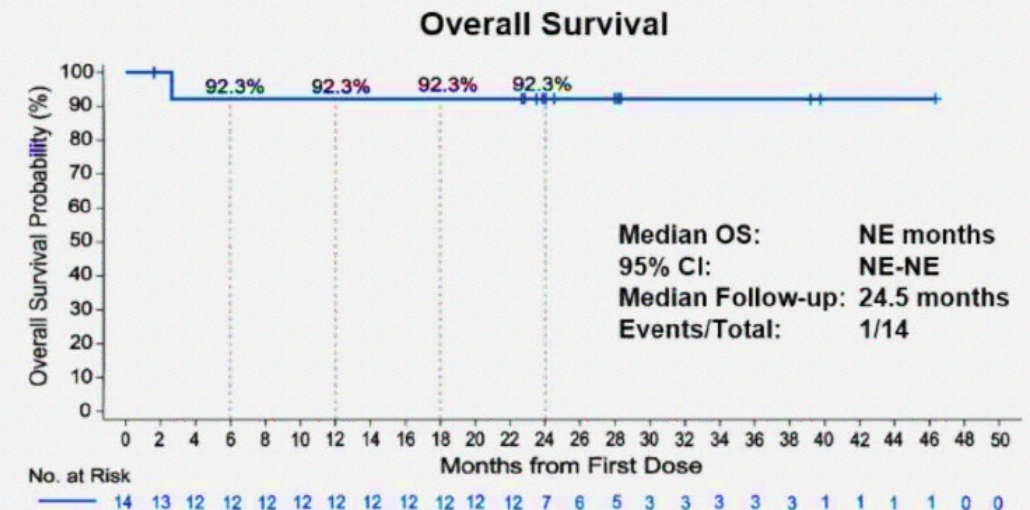
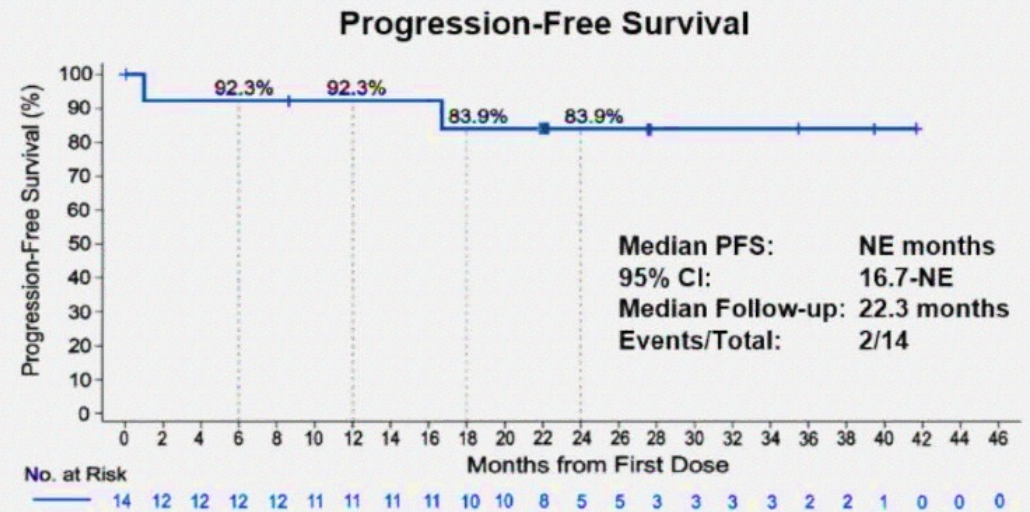


Pirtobrutinib for Patients with R/R cBTKi-Naïve MCL



cBTKi Naive Cohort:

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



R/R = relapsed/refractory; cBTKi = covalent Bruton tyrosine kinase inhibitor; ORR = overall response rate

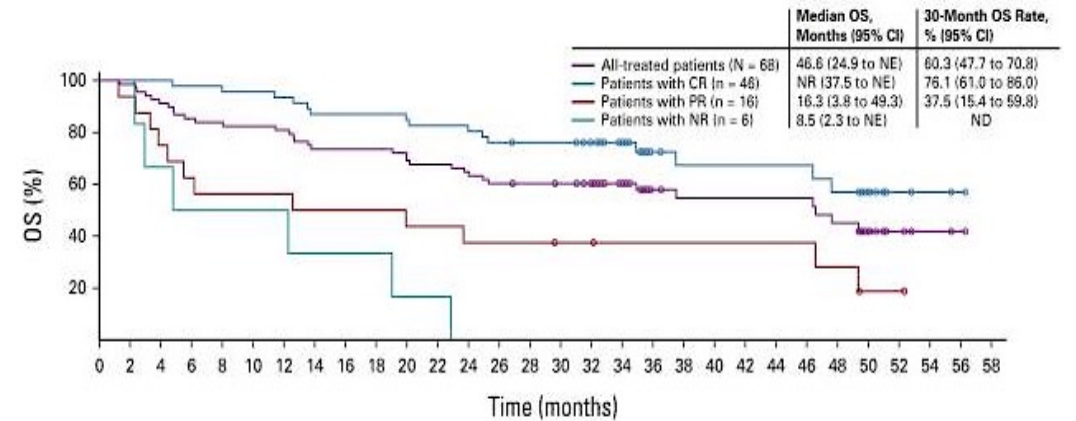
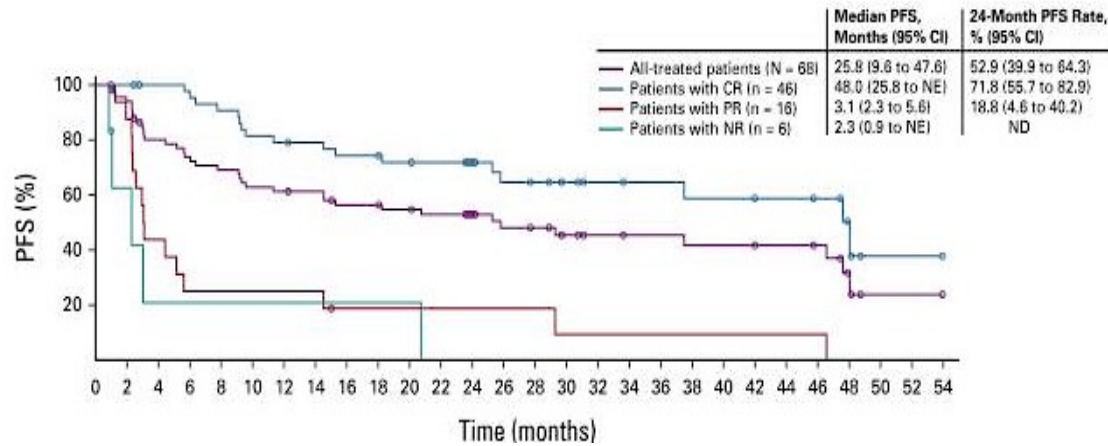
Relapsed/Refractory MCL: Pirtobrutinib – Safety

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

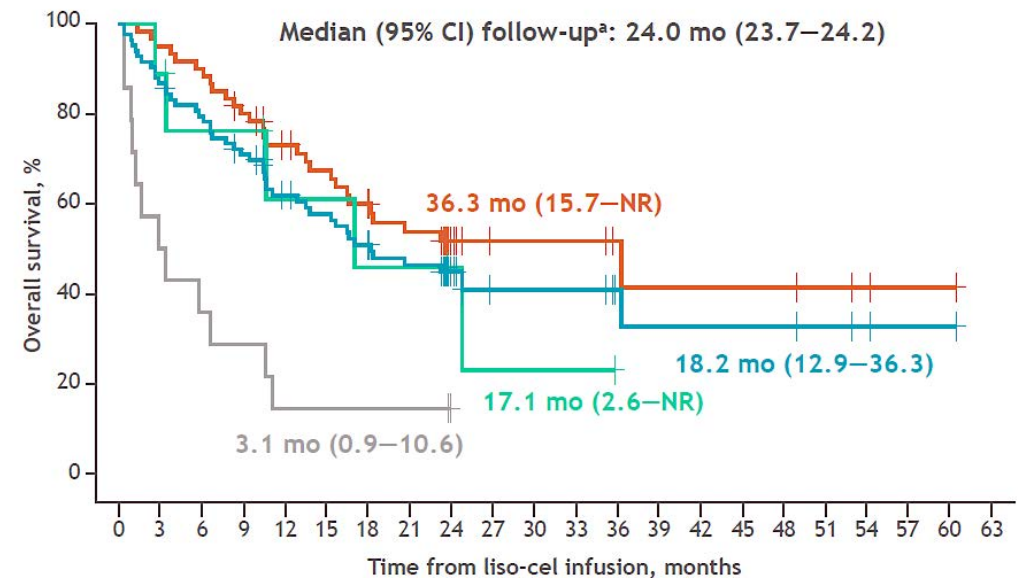
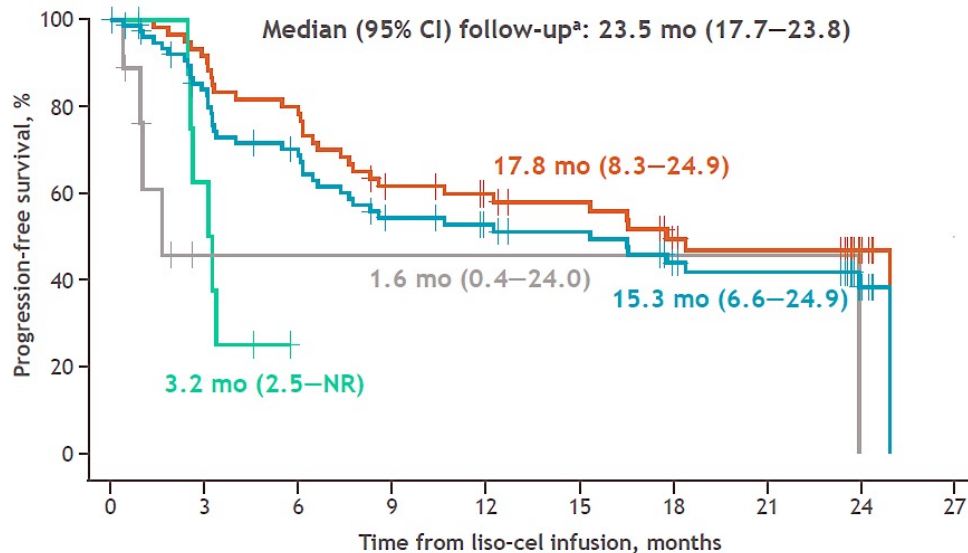
ZUMA-2: Brexu-cel

N=68		
ORR, n (%)	91%	
Best response, n (%)	CR	68%
	PR	24%



TRANSCEND NHL 001: Liso-cel

N=74		
ORR, n (%)		86.5%
Best response, n (%)	CR	74.3%
	PR	12.2%



Agenda

Module 1: Follicular Lymphoma (FL) — Dr Zelenetz

Module 2: Mantle Cell Lymphoma (MCL) — Dr Lunning

Module 3: Hodgkin Lymphoma (HL) — Dr LaCasce

Module 4: Diffuse Large B-Cell Lymphoma (DLBCL) — Dr Maddocks



Dana-Farber
Cancer Institute

Hodgkin Lymphoma

Ann S. LaCasce, MD, MMSc

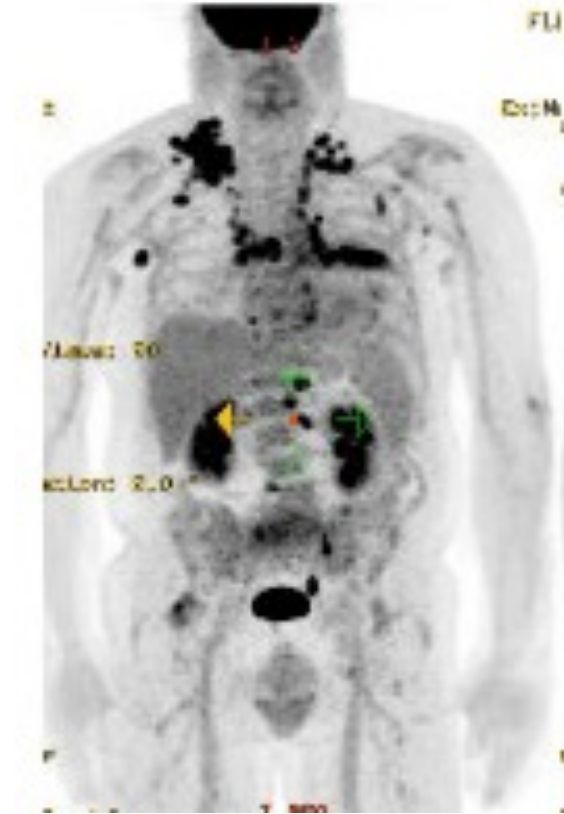
March 23, 2024

Disclosures

Advisory Committees	Kite, A Gilead Company, Seagen Inc
Data and Safety Monitoring Board/Committee (Does Not Take Payment)	Bristol Myers Squibb

59-Year-Old M with Stage IVA cHL

- Noted right neck node on self exam as well as right sided chest pain.
- Chest CT with supraclavicular and mediastinal adenopathy and mild splenomegaly.
- Core need biopsy revealed classic HL, NOS. RS cells CD30 and CD15 positive.
- PET revealed disease in the bilateral supraclavicular and mediastinum. He had uptake in a LUL pulmonary nodule, ribs and spine with soft tissue mass associated with right second rib. He had bilateral effusion and heterogeneous uptake in the axial and appendicular skeleton.
- His IPS was a 3: M, age \geq 45 and stage IV disease.



Management of advanced stage HL patients

Adult oncology US:

**Brentuximab vedotin
+
AVD**

BV-AVD

6 yr PFS: 82%

Neuropathy

Connors et al. NEJM 2017

**Adult oncology
Europe:**

**Escalated
BEACOPP
(PET adapted)**

EscBEACOPP

5 yr PFS: 91%

**Risk of infertility
Stem cell damage
(MDS/AML)**

Borchmann et al. Lancet Onc 2017

Pediatric oncology US:

**Brentuximab
vedotin
+
AVEPC +/- RT**

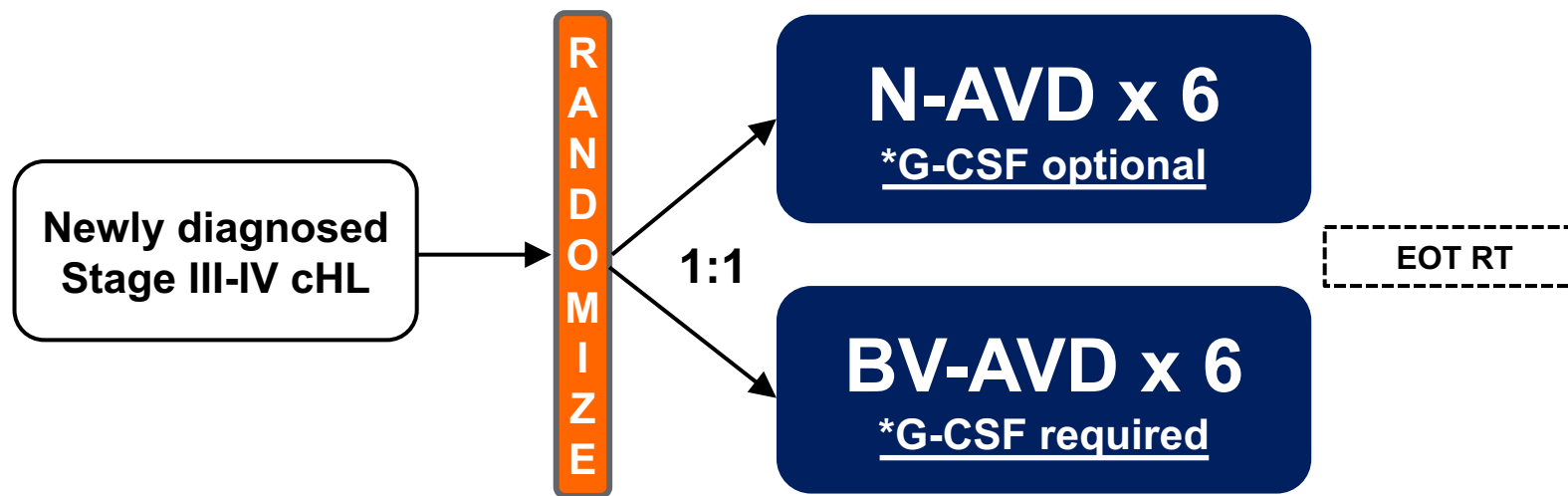
BV-AVEPC + RT

3 yr PFS: 92%

RT related side effects

Castellino et al. NEJM 2022

S1826: study design and eligibility criteria



Key Inclusion

- Age \geq 12 years old
- HIV+ eligible, if controlled
- Zubrod PS 0-2 (Peds: Lansky)
- LVEF \geq 50% (or SF \geq 27%)

Key Exclusion

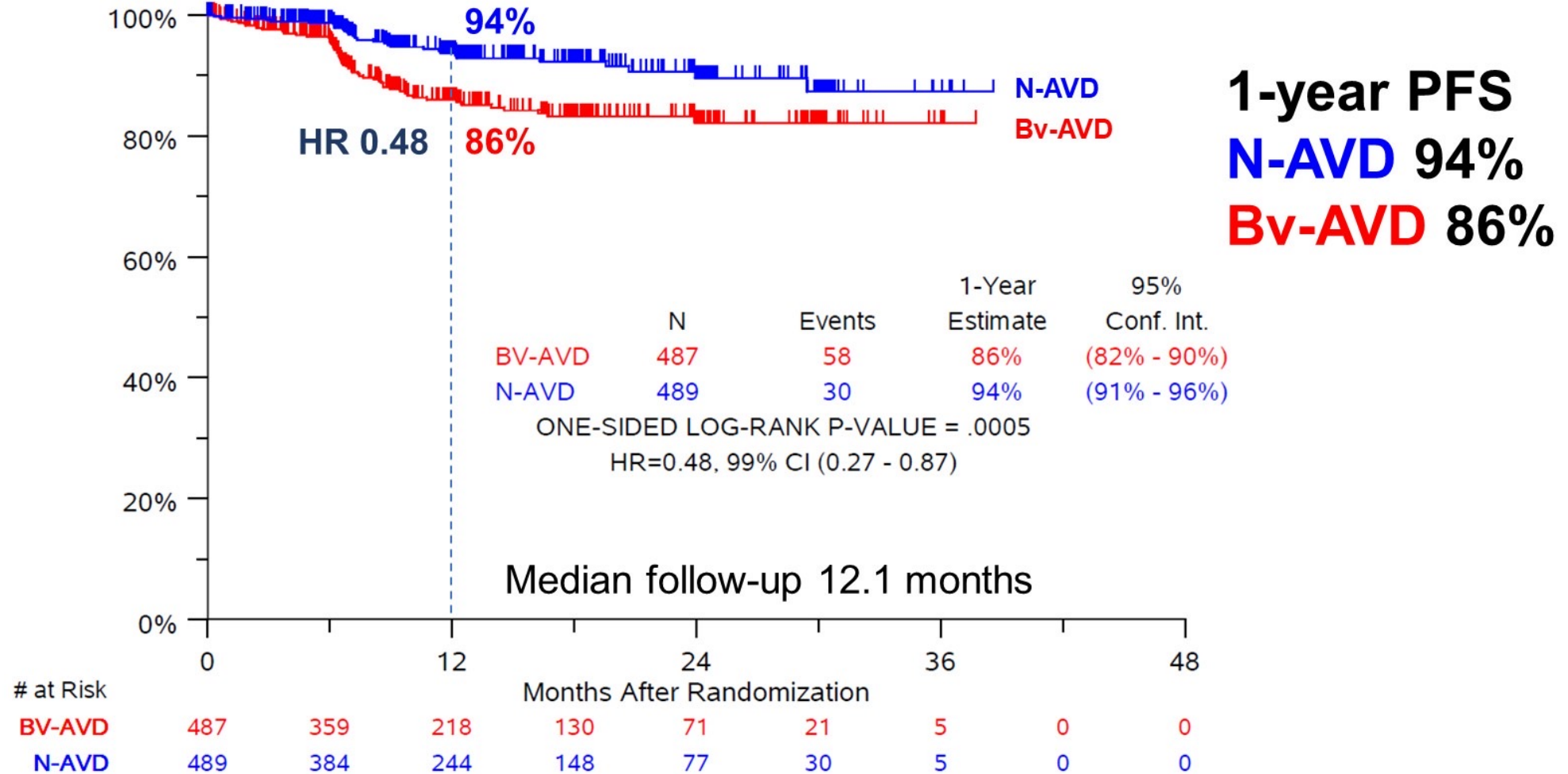
- Interstitial lung disease or pneumonitis
- Peripheral neuropathy \geq Gr2
- Active autoimmune disease

S1826 Baseline Characteristics

Baseline characteristics	N-AVD n=489 N (%)	Bv-AVD n=487 N (%)	Baseline characteristics	N-AVD n=489 N (%)	Bv-AVD n=487 N (%)
Age, median (range)	27 (12-83)	26 (12-81)	Stage		
12-17 years	120 (25%)	117 (24%)	III	187 (38%)	167 (34%)
18-60 years	323 (66%)	323 (66%)	IV	301 (62%)	317 (65%)
≥ 61 years	46 (9%)	47 (10%)	Not reported	1 (0.2%)	3 (1%)
Female Sex	218 (45%)	213 (44%)	B symptoms present	286 (58%)	274 (56%)
Race			IPS Score		
White	375 (77%)	364 (75%)	0-3	331 (68%)	330 (68%)
Black	57 (12%)	56 (11%)	4-7	158 (32%)	157 (32%)
Asian	11 (2%)	17 (3%)	Bulky disease > 10cm	155 (32%)	131 (27%)
Other/Unknown	46 (9%)	50 (10%)	HIV+	10 (2%)	5 (1%)
Hispanic	68 (14%)	59 (12%)			

Representative study, inclusive of high-risk pts

S1826 Primary endpoint met: superior PFS of nivolumab-AVD vs BV-AVD

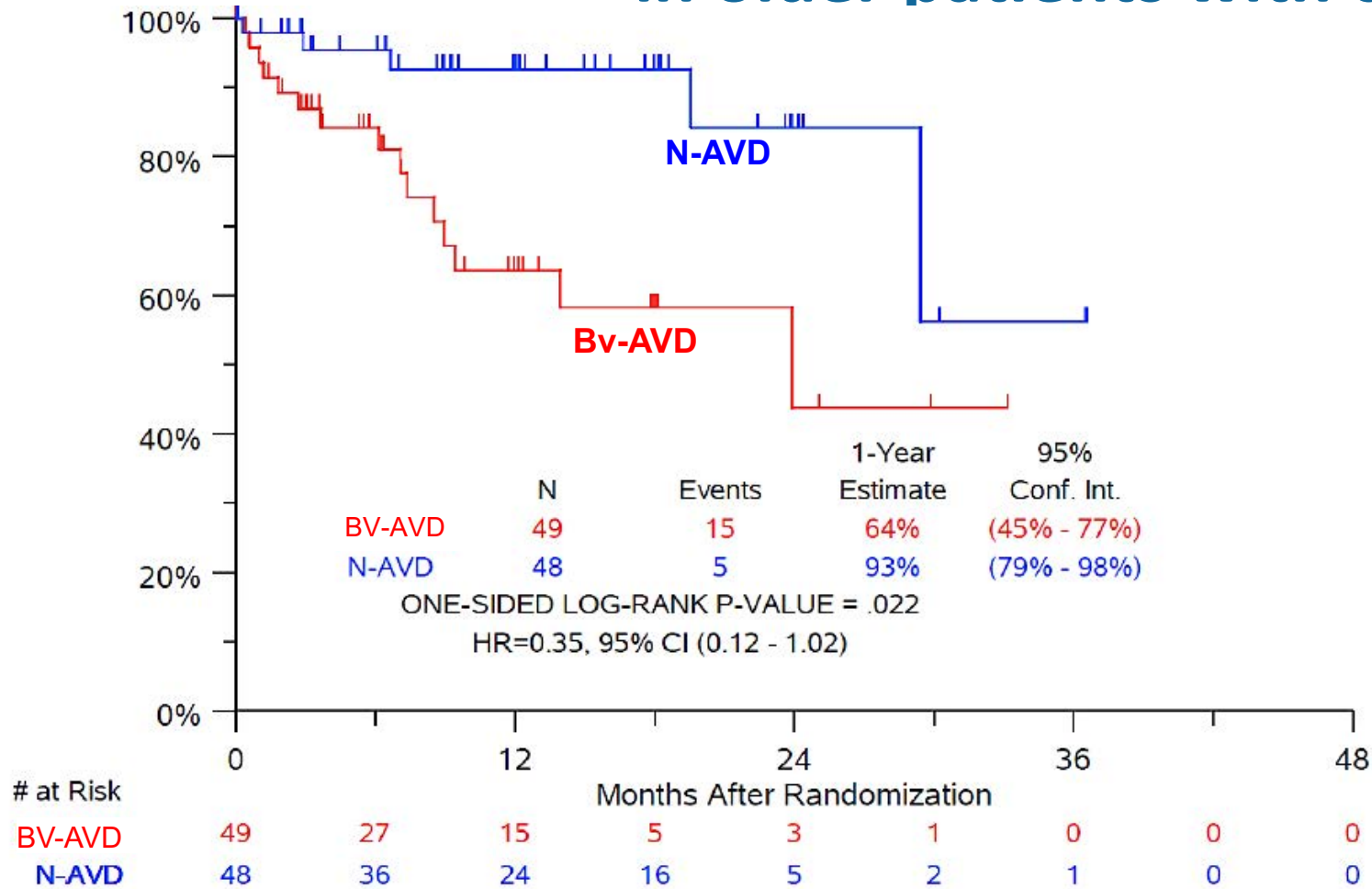


S1826: Results favor N-AVD with regard to short-term toxicities

	Received g-CSF	Febrile neutropenia	Thyroid dysfunction	ALT increased	Peripheral sensory neuropathy	Peripheral motor neuropathy	Discontinued N or BV
N-AVD	54%	5%	10%	32%	29%	4%	11%
BV-AVD*	95%	7%	1%	41%	55%	7%	22%

* Growth factor support mandated per protocol

S1826: N-AVD markedly improves PFS over Bv-AVD in older patients with cHL

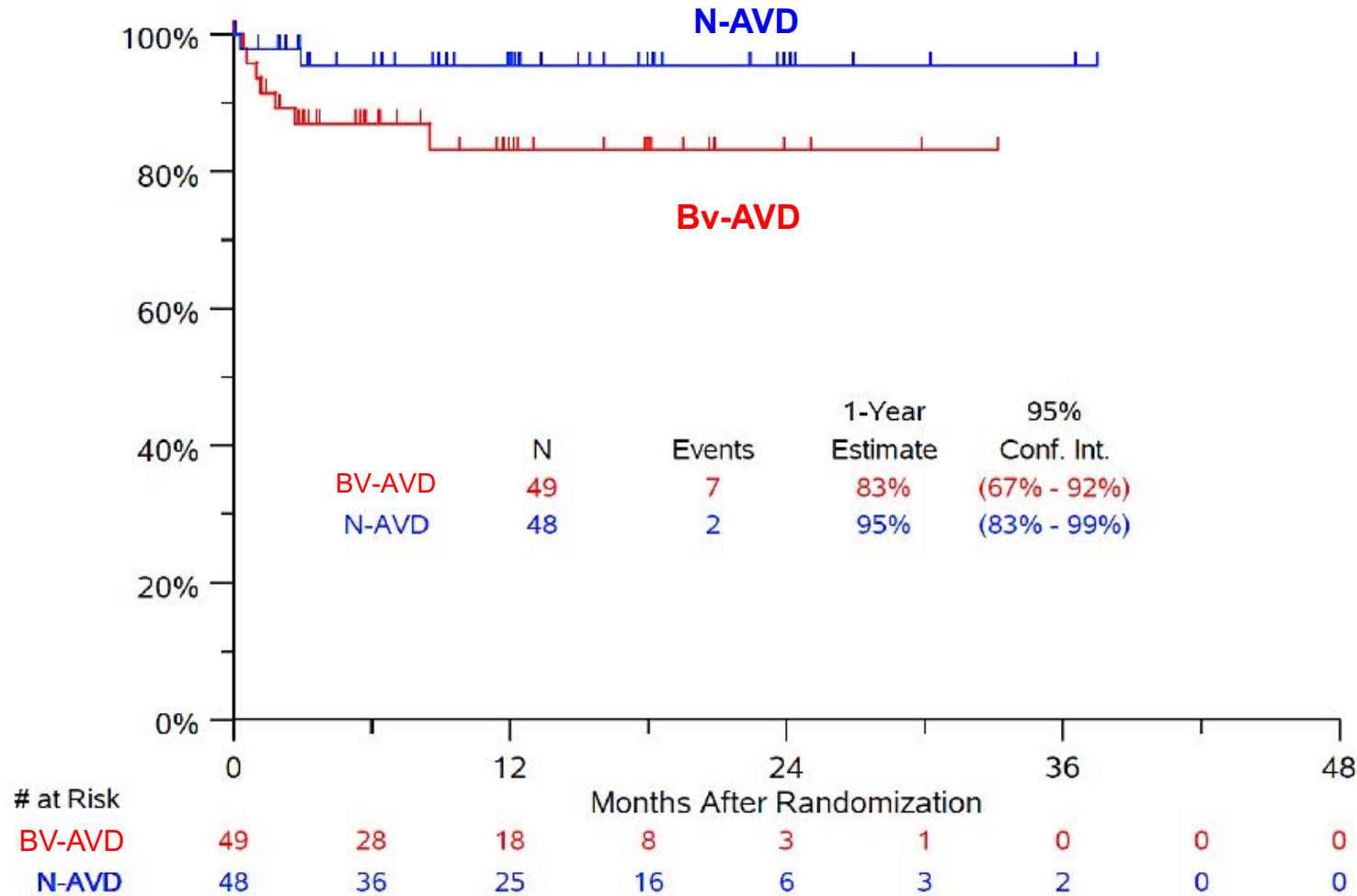


1-year PFS
N-AVD 93%
Bv-AVD 64%

Median follow-up
 12.1 months

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

S1826: Fewer deaths occurred on N-AVD vs Bv-AVD



1-year OS
N-AVD 95%
Bv-AVD 83%

Median follow-up
 12.1 months

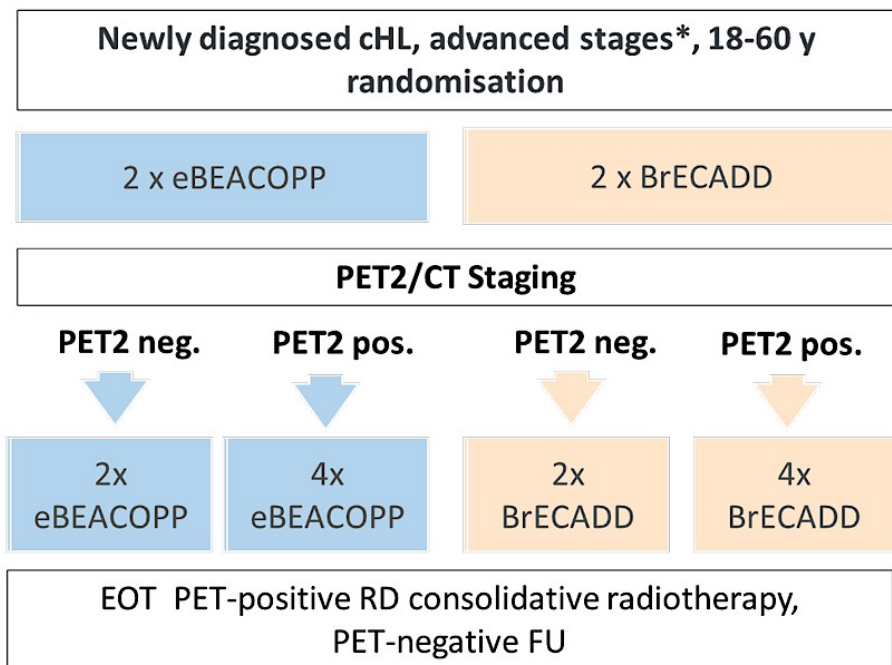
p-value = 0.091
 HR=0.35,
 95% CI (0.07-1.75)

S1826: Majority of deaths on Bv-AVD due to infection/sepsis

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%

HD21:BEACOPP vc BrECADD

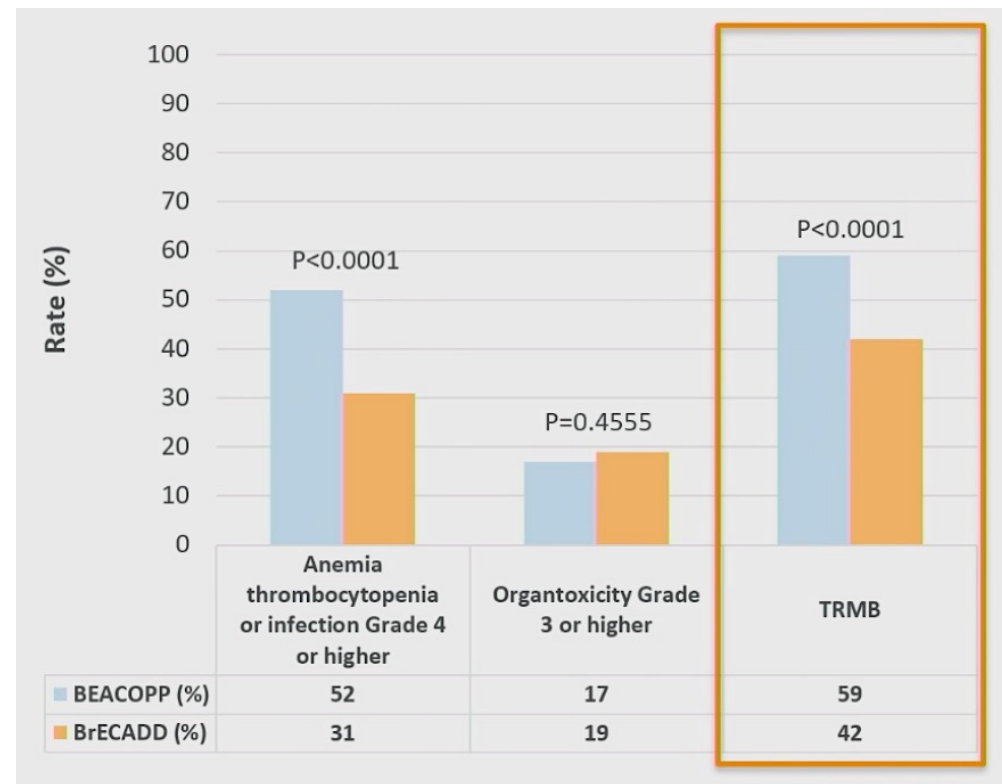


* Includes stage IIB with RF LMM or ED, and stage II and IV

Co-primary endpoints:

Superiority for treatment related morbidity

Non-inferiority for efficacy

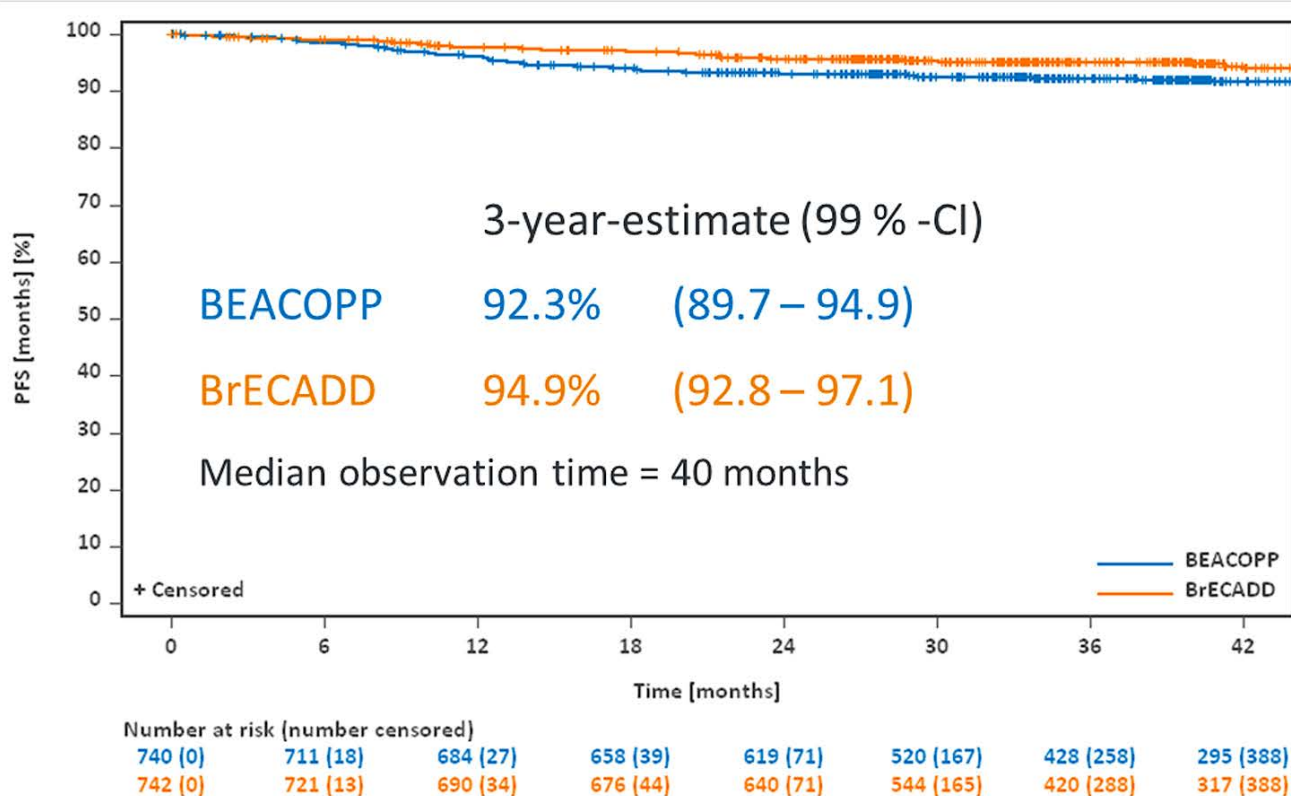


BrECADD superior:

Lower transfusions
Peripheral neuropathy
Normalization of FSH

BrECADD is non-inferior to eBEACOPP in patients with advanced stage classical Hodgkin Lymphoma: efficacy results of the GHSG phase III HD21 trial.

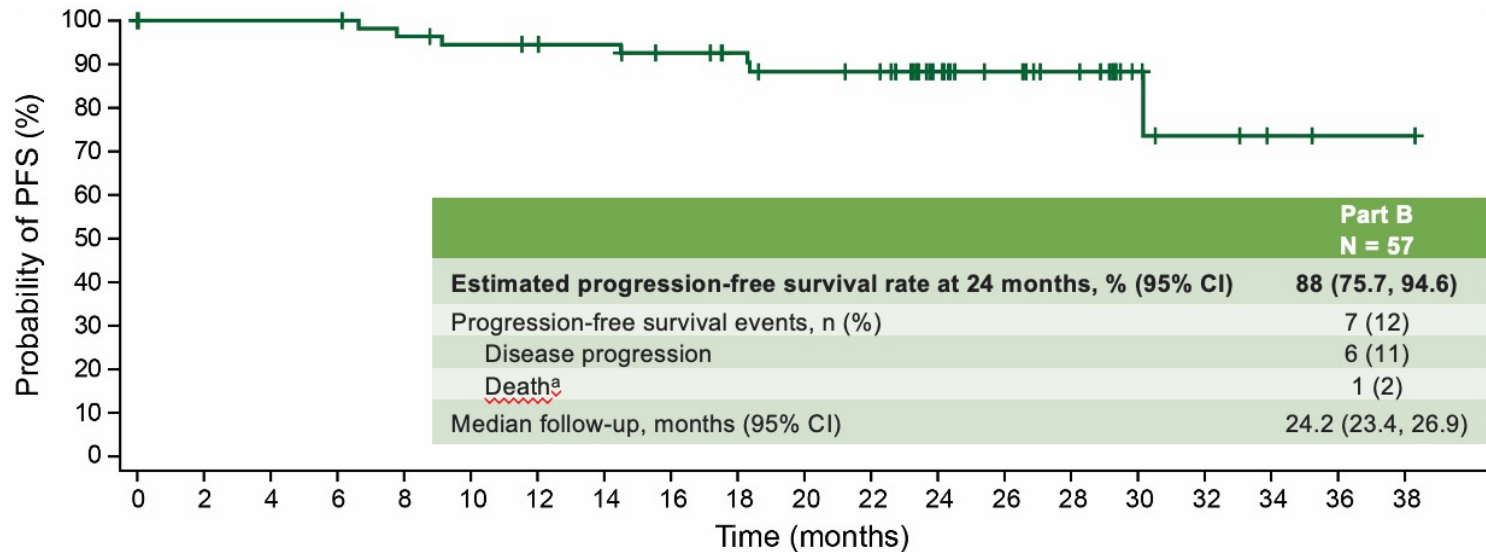
Borchmann et al. **HD21 PFS – ITT**



	eBEACOPP N=740		BrECADD N=742	
	n	%	n	%
Progression/Relapse	55	7.4	32	4.3
Progression	14	1.9	5	0.7
Early Relapse, FU ≤ 1 year	23	3.1	11	1.5
Late Relapse, FU > 1 year	18	2.4	16	2.2
Death without previous PRO or REL	6	0.9	7	0.9
PFS events, total	61	8.4	39	5.3

BV+Nivo plus AD in advanced stage HL

88% rate of progression-free survival after 2 years; no patients had subsequent radiation therapy

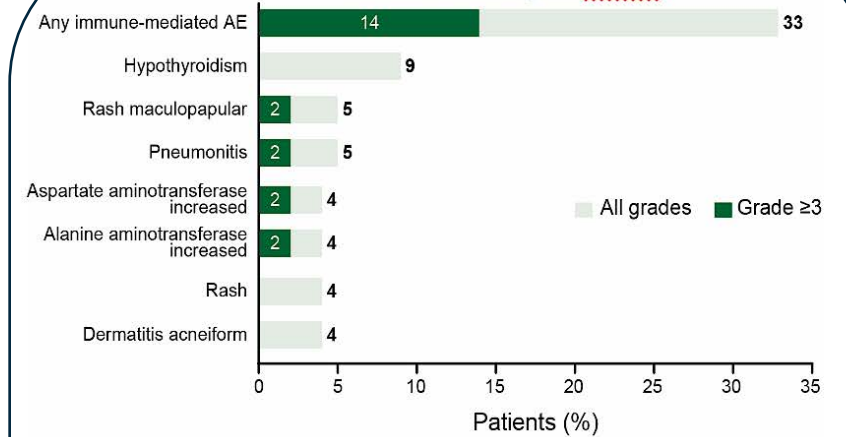


N at risk (events)

Part B 57(0) 56(0) 56(0) 56(0) 53(2) 51(3) 50(3) 49(3) 46(4) 43(4) 40(6) 39(6) 28(6) 21(6) 17(6) 7(6) 4(7) 2(7) 1(7) 1(7)

^aPatient died due to sepsis approximately 3.5 months following last dose of study drug

Treatment-emergent imAEs

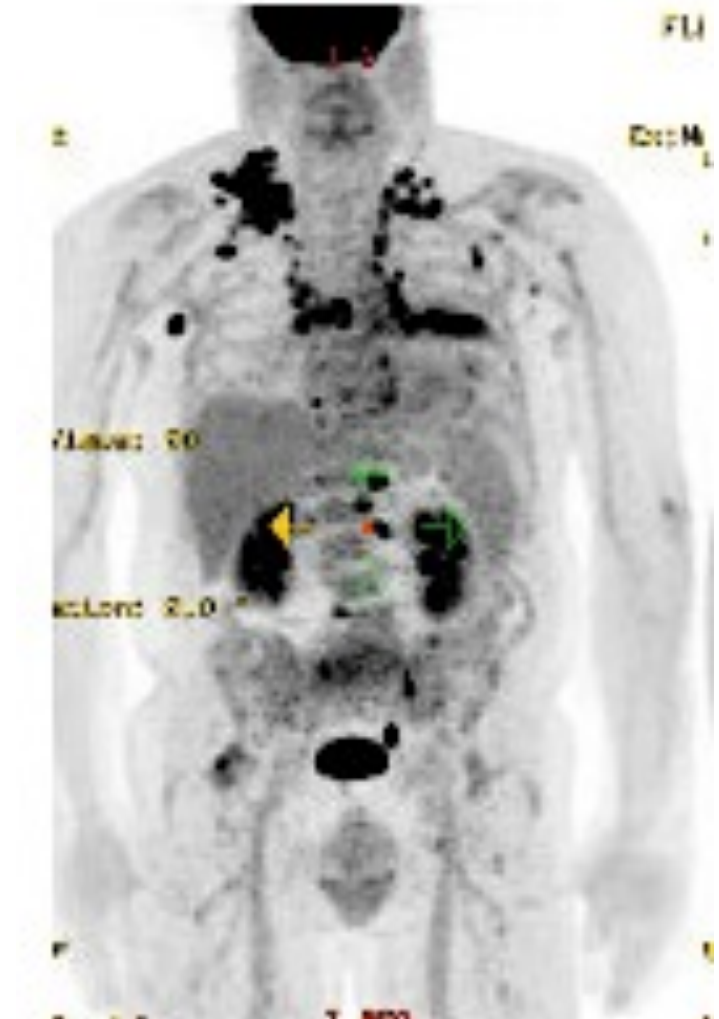


≥2% of patients (all grades) or any patients with grade ≥3

- Immune-mediated adverse events (imAEs) reported were primarily grade 1-2, and were consistent with the safety profile of nivolumab
- 4/57 (7%) had imAEs leading to discontinuation of nivolumab:
 - Colitis (n=1), hypophysitis (n=1), pneumonitis (n=1), Type 1 diabetes (n=1)

59-Year-Old M with Stage IVA Disease

- He was treated with BV+AVD
- Course was complicated by peripheral neuropathy and GI toxicity
- Interim and end of treatment PET/CT with Deauville 2
- He remains in remission



Future directions

Can we give less chemotherapy?

Some chemo likely required

Add BV to PD-1 inhibitors/optimal regimen

Risk adapt using imaging/ct DNA

PD-1 inhibitors with low CR rates as single agent.

BV-nivo in older patients with mixed results.

**Nivo-AVD
BV+nivo + AD
BrECADD**

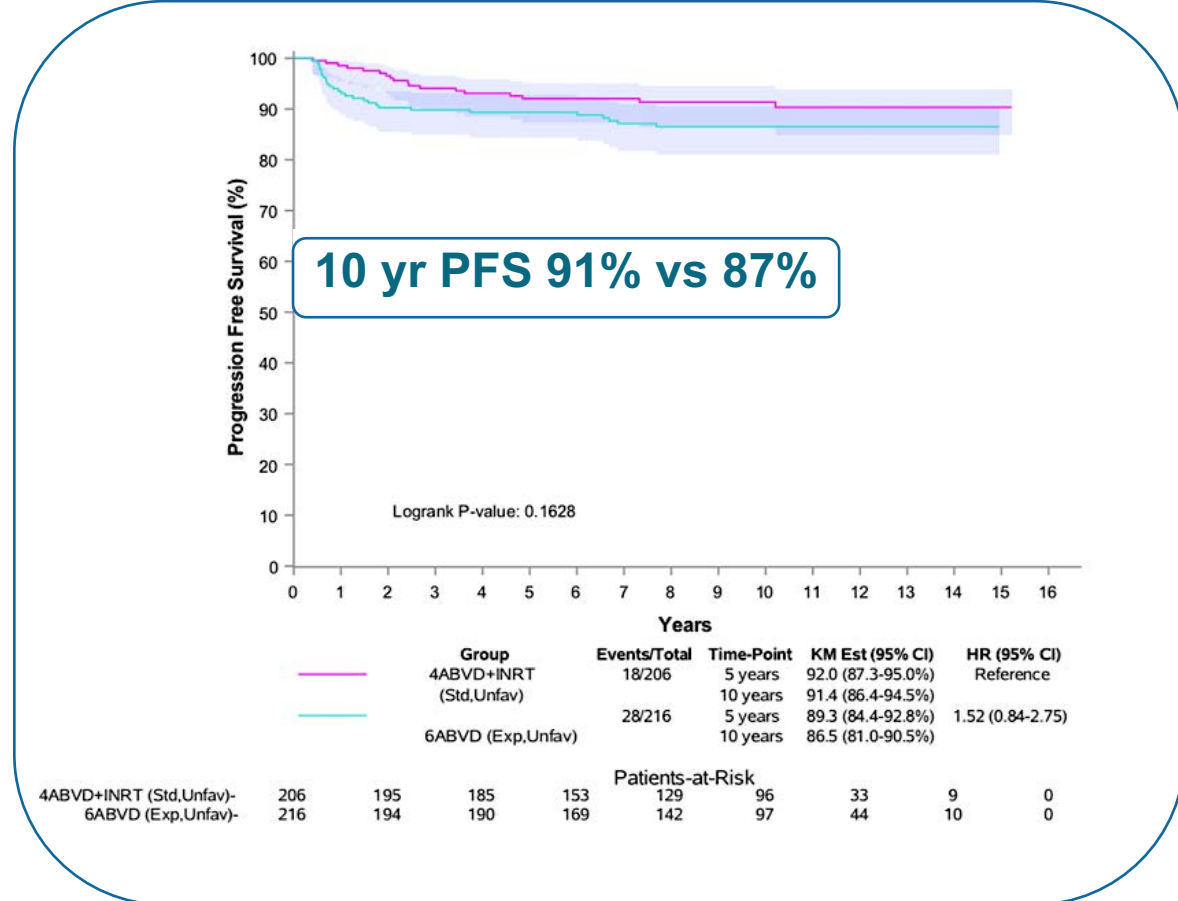
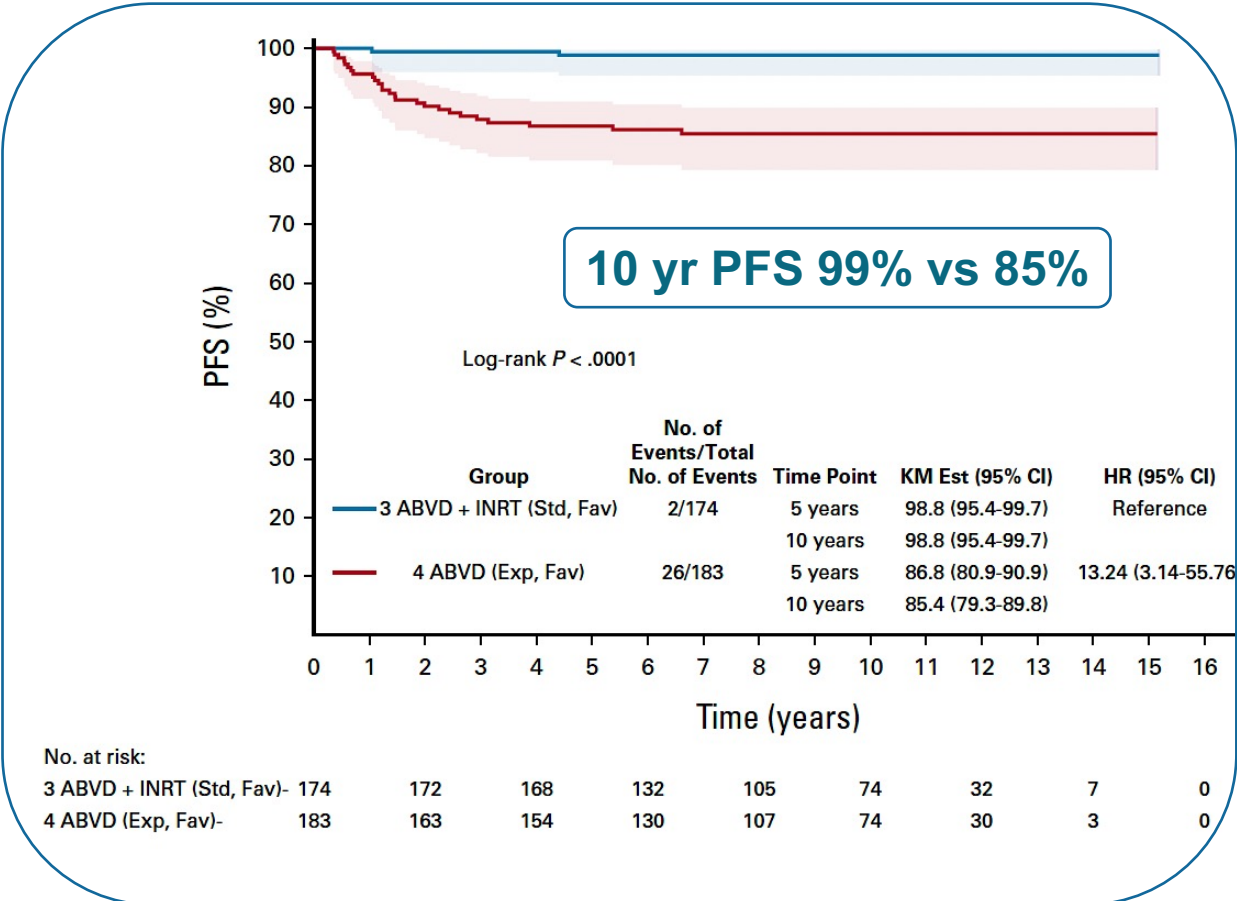
Will require analysis of current data to design de-escalation studies.

Early stage HL therapy

Current standard of care	Recent advances	On-going
ABVD chemotherapy PET adapted/individualized use of RT	Many phase 2 studies with encouraging PFS with less RT	Randomized study to assess impact of BV and PD-1 inhibitors

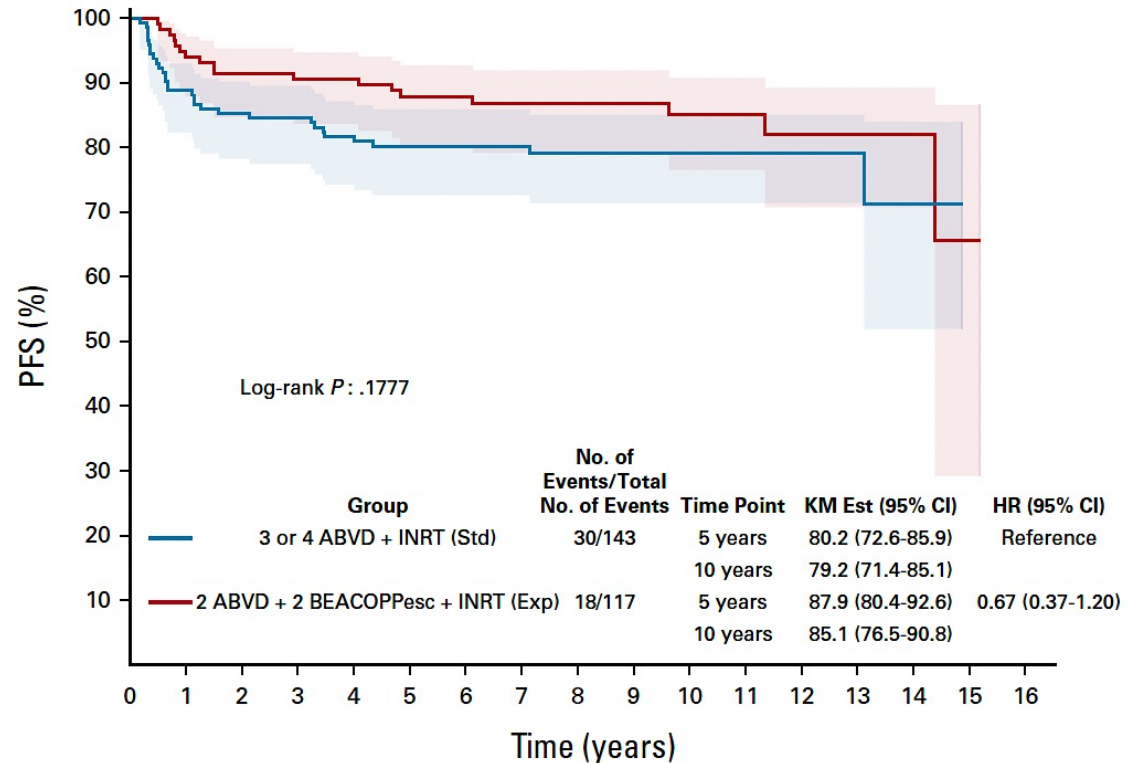
Long term follow-up of PET 2 negative patients

Positive PET = Deauville 3-5
81% of patients PET2 negative



Long term follow-up of PET 2 positive patients

Positive PET = Deauville 3-5
19% of patients PET2 positive

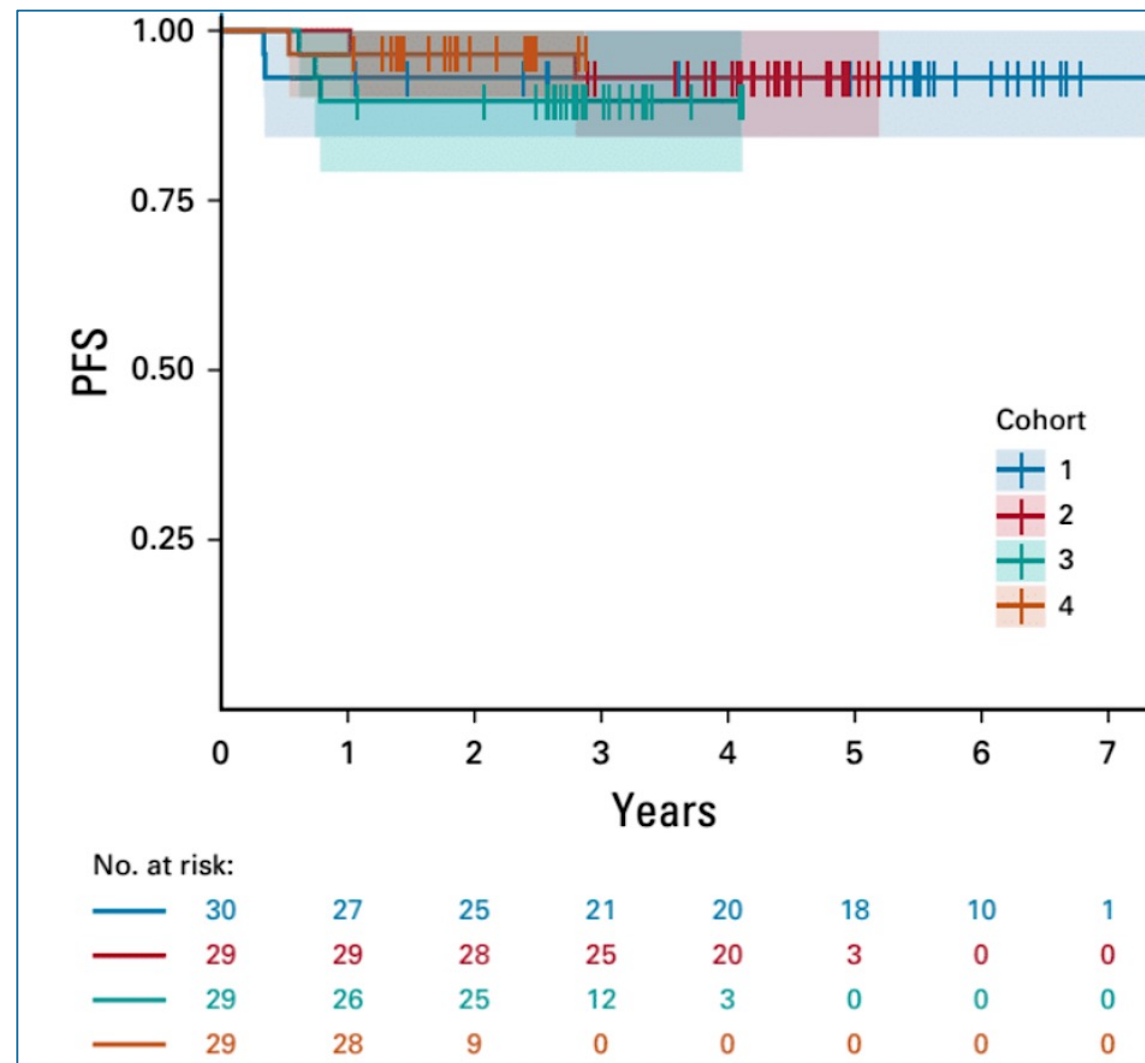
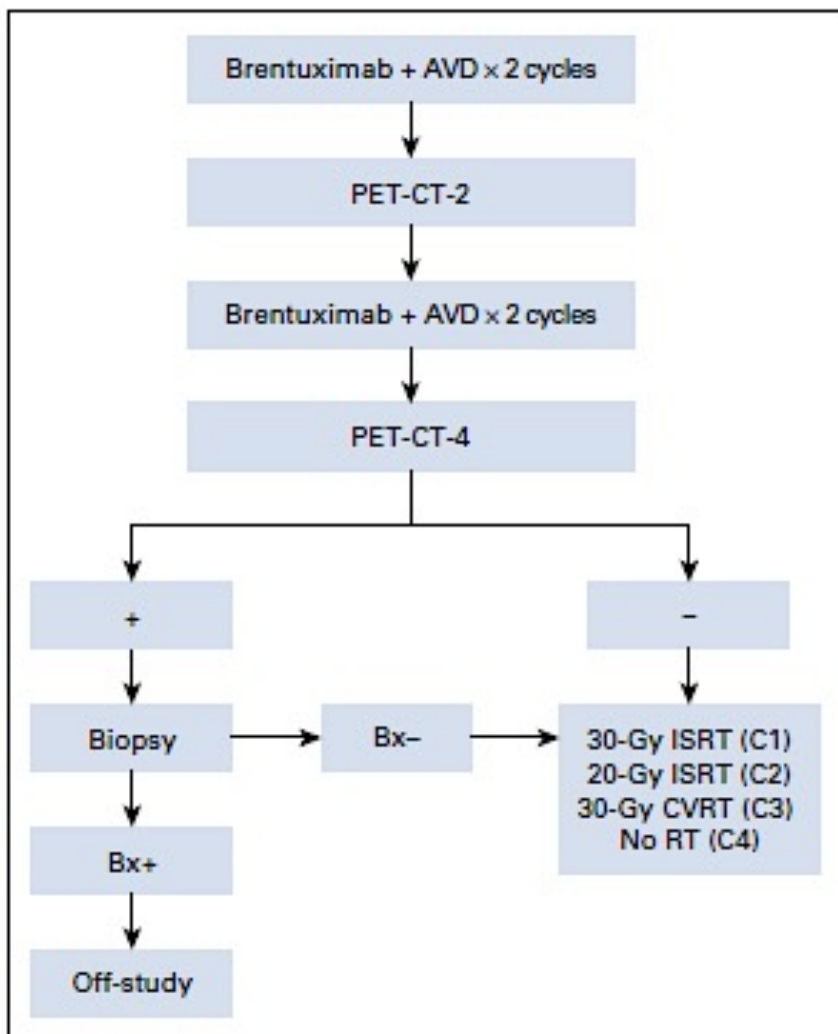


10 yr PFS 80% vs 85%

No. at risk:

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
3 or 4 ABVD + INRT (Std)-	143	121	112	93	73	51	22	6	0							
2 ABVD + 2 BEACOPPesc + INRT (Exp)-	117	107	101	87	74	45	21	6	0							

BV-AVD +/- RT with excellent outcomes in unfavorable HL



Nivolumab + AVD (concurrent and sequential) in early unfavorable HL very promising though all patients received RT

Randomized phase 2

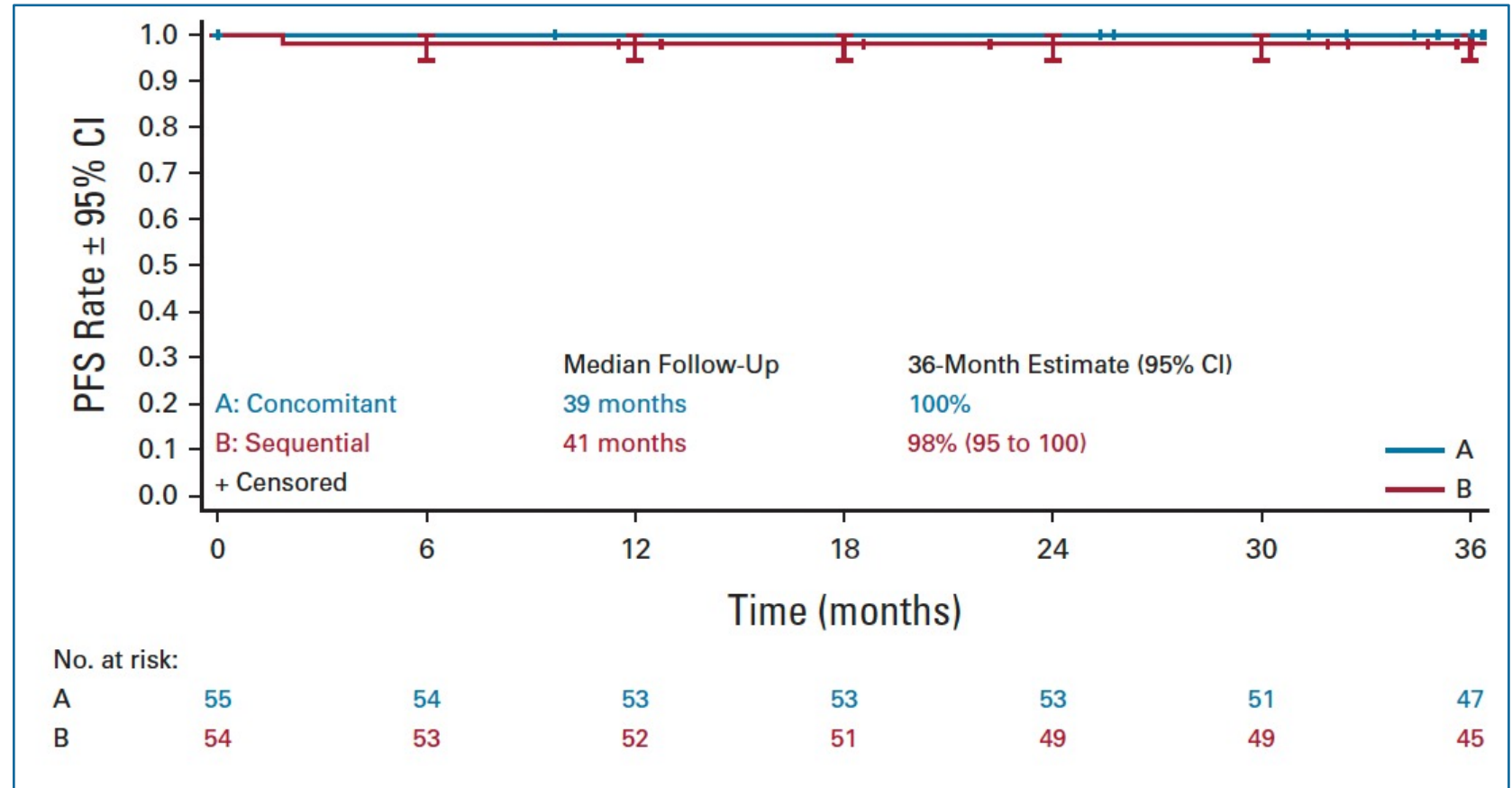
A: 4 x N-AVD

B: 4 x N

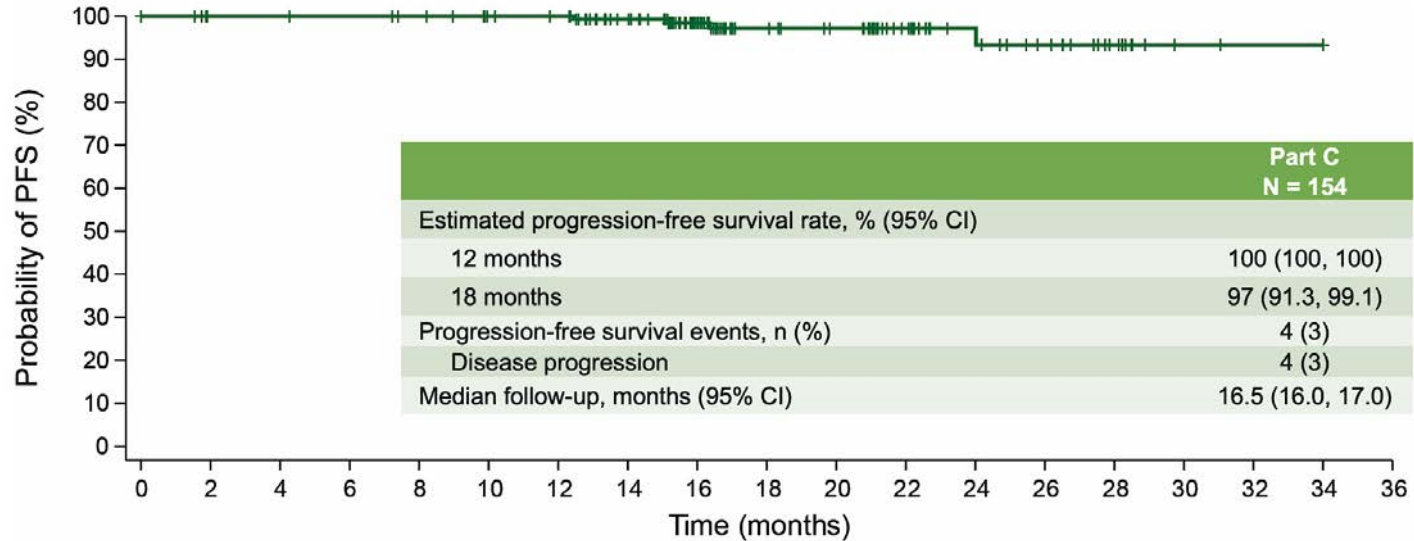
2 x N-AVD

2 x AVD

30 Gy
ISRT

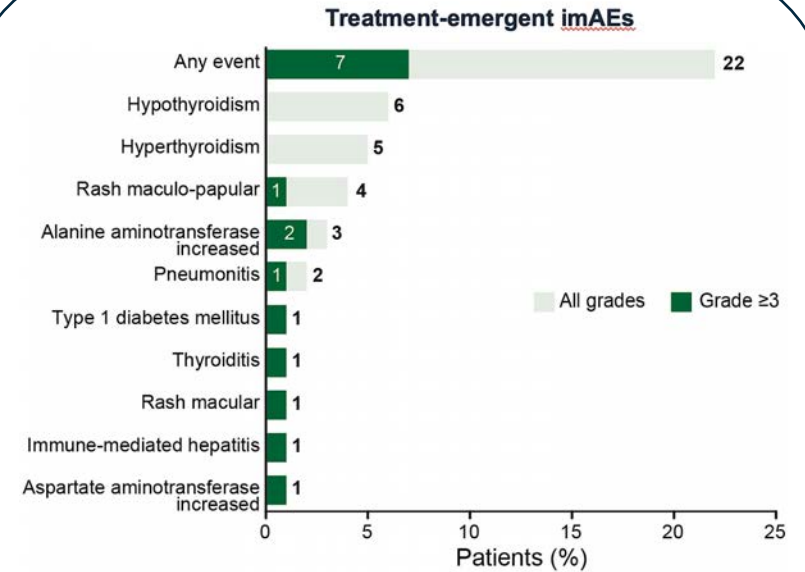


BV+Nivo plus AD x 4 in non bulky stage I/II HL



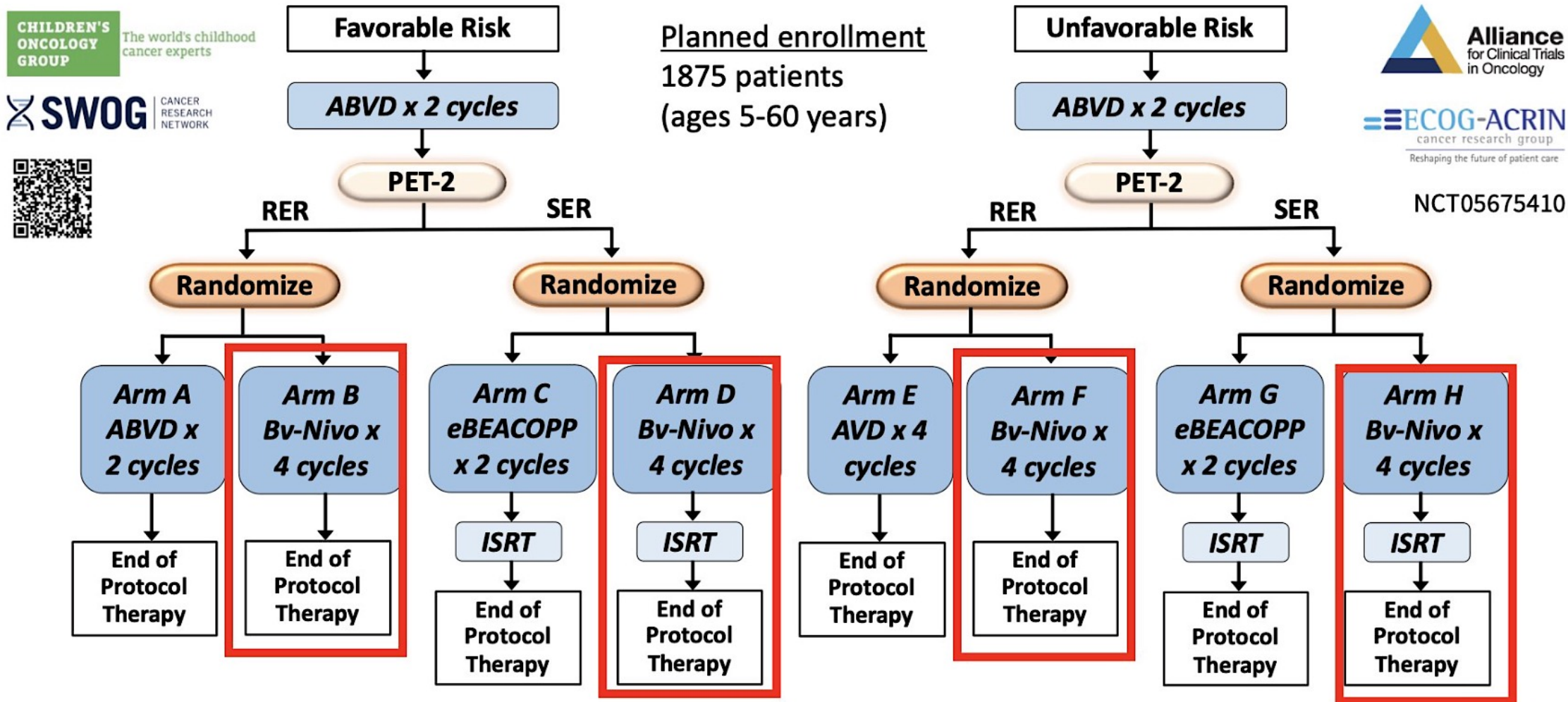
N at risk (events)

Part C 154(0) 150(0) 150(0) 149(0) 147(0) 142(0) 140(0) 124(1) 90(2) 60(3) 55(3) 38(3) 25(3) 18(4) 10(4) 2(4) 1(4) 1(4) 0(4)



- The maximum grades for immune-mediated adverse events (imAEs) reported were primarily grade 1-2, and were consistent with the safety profile of nivolumab
- 4/154 (3%) had imAEs leading to discontinuation of nivolumab:
 - Pneumonitis (n=2), hepatitis (n=1), thyroiditis (n=1)

Standard therapy vs. immuno-oncology for children and adults with newly diagnosed stage I and II classic HL: AHOD 2131



Agenda

Module 1: Follicular Lymphoma (FL) — Dr Zelenetz

Module 2: Mantle Cell Lymphoma (MCL) — Dr Lunning

Module 3: Hodgkin Lymphoma (HL) — Dr LaCasce

Module 4: Diffuse Large B-Cell Lymphoma (DLBCL) — Dr Maddocks

Diffuse Large B Cell Lymphoma (DLBCL)

Kami Maddocks, MD

Professor Clinical Internal Medicine

The Ohio State University James Cancer Hospital

Disclosures

Consulting Agreements	AbbVie Inc, ADC Therapeutics, AstraZeneca Pharmaceuticals LP, Bristol Myers Squibb, Genentech, a member of the Roche Group, Genmab US Inc, Incyte Corporation, Janssen Biotech Inc, Kite, A Gilead Company, Lilly, MorphoSys
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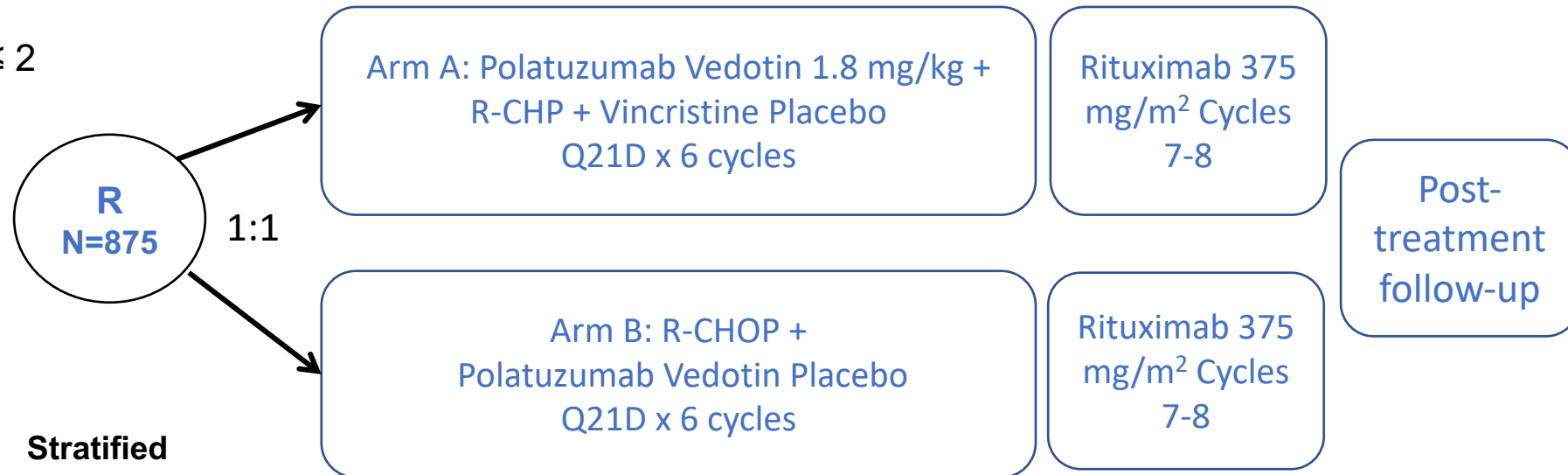
Patient Case

- 54 yo F with Stage IV Aggressive B Cell Lymphoma with rearrangement of c-myc and bcl-2
- Treated with 6 cycles of DA-REPOCH with IT methotrexate
- End of treatment PET consistent with CMR
- 7 months later presents with symptomatic relapse with inguinal node
- Pulse dex followed by leukapheresis
- Radiation to bulky inguinal disease
- Axi-cel infusion
- Day +30 PR, followed by progression
- Clinical Trial vs. Bispecific Antibody

POLARIX: R-CHOP vs R-CHP + Polatuzumab

Key eligibility criteria

- Previously untreated DLBCL
- Stage II to IV disease
- IPI ≥ 2
- ECOG PS ≤ 2



Stratified

- IPI Score (2 vs 3-5)
- Bulky Disease (present vs absent)
- Region

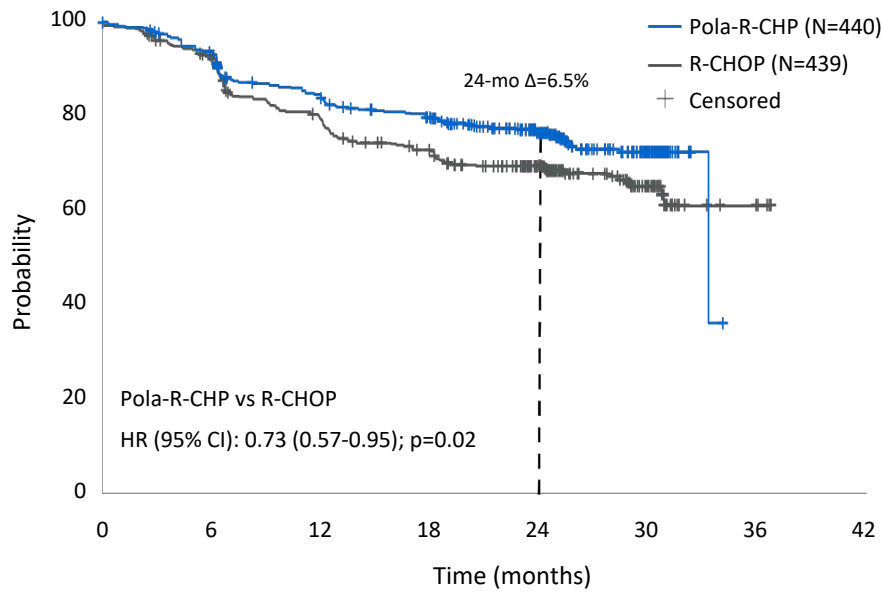
Primary endpoint: PFS by INV

Key secondary endpoints: EFS_{efficacy} by INV, PET CR at EOT by BICR, OS, safety

POLARIX: R-CHOP vs R-CHP + Polatuzumab

2-yr PFS 76.7 vs 70.2

PFS

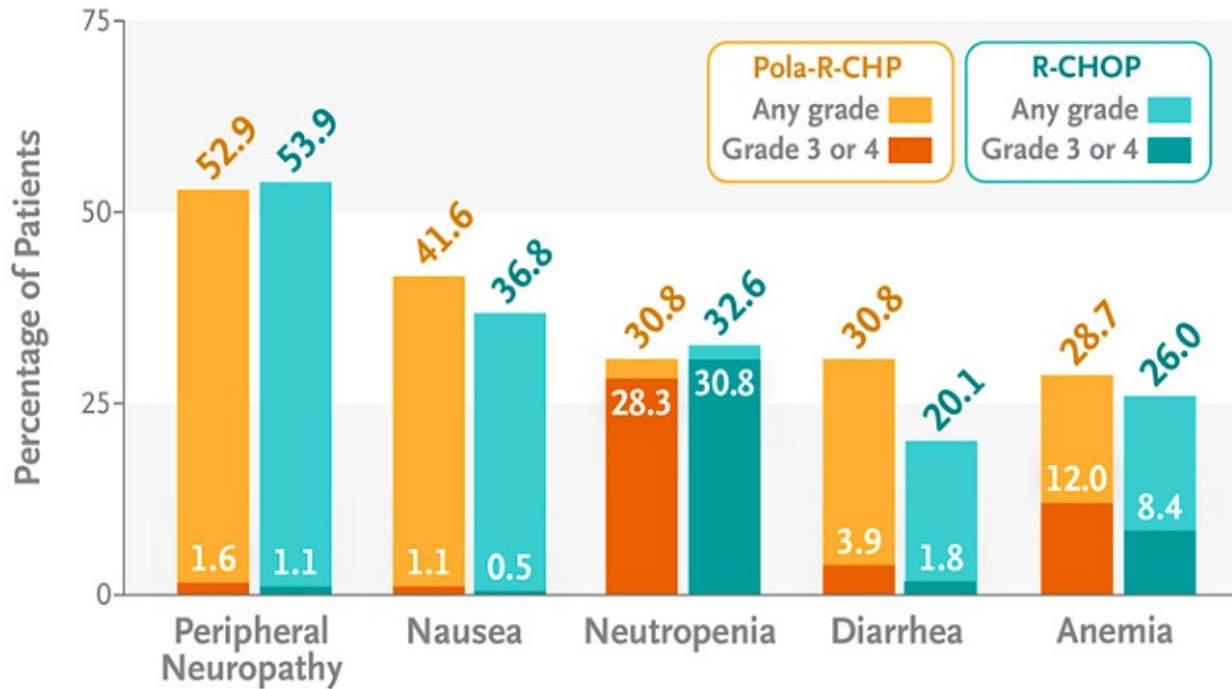


Number at risk								
	0	6	12	18	24	30	36	42
Pola-R-CHP	440	404	353	327	246	78	NE	NE
R-CHOP	439	389	330	296	220	78	3	NE

Baseline Risk Factors	Total N	Pola-R-CHP (N=440)		R-CHOP (N=439)		Hazard Ratio	95% Wald CI	Pola-R-CHP Better	R-CHOP Better
		n	2-year Rate	n	2-year Rate				
Age group									
≤60	271	140	74.1	131	71.9	0.9	(0.6 to 1.5)		
>60	608	300	77.9	308	69.5	0.7	(0.5 to 0.9)		
Sex									
Male	473	239	75.9	234	65.9	0.7	(0.5 to 0.9)		
Female	406	201	77.7	205	75.2	0.9	(0.6 to 1.4)		
ECOG PS									
0-1	737	374	78.4	363	71.2	0.8	(0.6 to 1.0)		
2	141	66	67.2	75	65.0	0.8	(0.5 to 1.4)		
IPI score									
IPI 2	334	167	79.3	167	78.5	1.0	(0.6 to 1.6)		
IPI 3-5	545	273	75.2	272	65.1	0.7	(0.5 to 0.9)		
Bulky disease									
Absent	494	247	82.7	247	70.7	0.6	(0.4 to 0.8)		
Present	385	193	69.0	192	69.7	1.0	(0.7 to 1.5)		
Geographic region									
Western Europe, United States, Canada, and Australia	603	302	78.6	301	72.0	0.8	(0.6 to 1.1)		
Asia	160	81	74.3	79	65.6	0.6	(0.4 to 1.5)		
Rest of world	116	57	70.8	59	67.3	0.9	(0.6 to 1.5)		
Ann Arbor stage									
I-II	99	47	89.1	52	85.5	0.6	(0.2 to 1.8)		
III	232	124	80.7	108	73.6	0.8	(0.5 to 1.3)		
IV	548	269	72.6	279	66.1	0.8	(0.6 to 1.1)		
Baseline LDH									
≤ULN	300	146	78.9	154	75.6	0.8	(0.5 to 1.3)		
>ULN	575	291	75.4	284	67.2	0.7	(0.5 to 1.0)		
No. of extranodal sites									
0-1	453	227	80.2	226	74.5	0.8	(0.5 to 1.1)		
≥2	426	213	73.0	213	65.8	0.7	(0.5 to 1.0)		
Cell-of-origin									
GCB	352	184	75.1	168	76.9	1.0	(0.7 to 1.5)		
ABC	221	102	83.9	119	58.8	0.4	(0.2 to 0.6)		
Unclassified	95	44	73.0	51	86.2	1.9	(0.8 to 4.5)		
Unknown	211	110	73.8	101	64.3	0.7	(0.4 to 1.2)		
Double expressor by IHC									
DEL	290	139	75.5	151	63.1	0.6	(0.4 to 1.0)		
Non DEL	438	223	77.7	215	75.7	0.9	(0.6 to 1.3)		
Unknown	151	78	76.0	73	69.8	0.8	(0.4 to 1.5)		
Double- or triple-hit lymphoma									
Yes	45	26	69.0	19	88.9	3.8	(0.8 to 17.6)		
No	620	305	76.8	315	70.3	0.7	(0.5 to 1.0)		
Unknown	214	109	78.5	105	66.4	0.6	(0.4 to 1.1)		

POLARIX: R-CHOP vs R-CHP + Polatuzumab

Adverse Events



n (%)	Pola-R-CHP (n = 435)	R-CHOP (n = 438)
Any-grade adverse events	426 (97.9)	431 (98.4)
Grade 3–4	251 (57.7)	252 (57.5)
Grade 5	13 (3.0)	10 (2.3)
Serious adverse events	148 (34.0)	134 (30.6)
Adverse events leading to:		
Discontinuation of any study drug	27 (6.2)	29 (6.6)
Polatuzumab vedotin/vincristine	19 (4.4)	22 (5.0)
Dose reduction of any study drug	40 (9.2)	57 (13.0)

ITT population. Data cutoff: June 28, 2021; median 28.2 months' follow-up.

	Any Grade	Grade 3–4	Any Grade	Grade 3–4
PN	230 (52.9)	7 (1.6)	236 (53.9)	5 (1.1)
FN	62 (14.3)	60 (13.8)	35 (8.0)	35 (8.0)

CAR T-Cell Therapy: Randomized Trials in Second Line for Refractory DLBCL

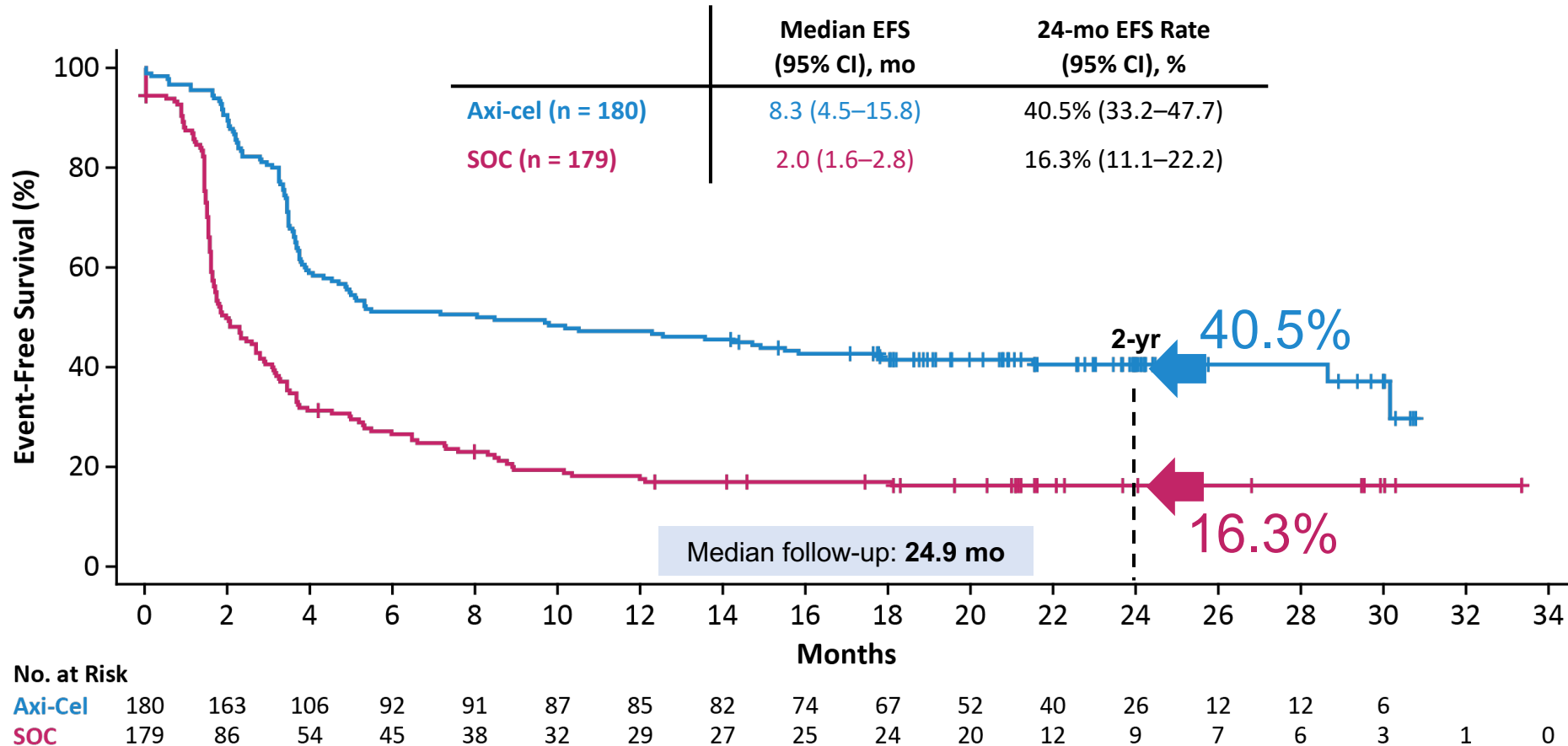
Patient population: Primary refractory or relapse within 12 mo of therapy

	Bridging Allowed*	Bridging, %	CAR T, %	ASCT, %	Crossover Planned [†]	Crossover, %	Primary Endpoint
ZUMA-7 N = 180	No (Steroids)	0	94	36	No	56	EFS
TRANSFORM N = 92	Yes (Protocol Defined SOC)	63	97	46	Yes	51	EFS
BELINDA N = 162	Yes (PI Choice of 4 Platinum Based Regimens)	83	96	33	Yes	51	EFS

*ZUMA-7 allowed steroids only; [†]BELINDA permitted crossover only after 2 lines of salvage.

ZUMA-7 (axi-cel): Primary Endpoint

HR 0.40 (95% CI, 0.31–0.51); $P < .001$



ZUMA-7 (axi-cel)

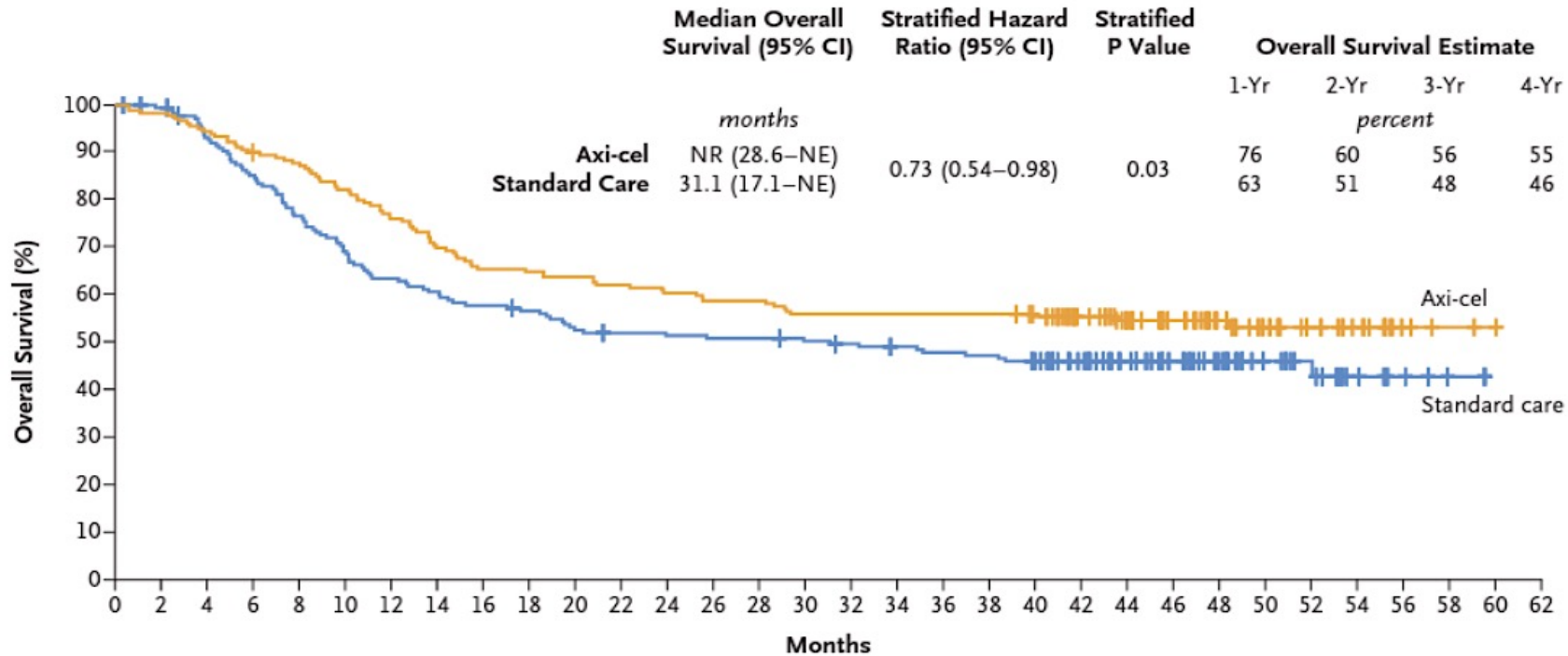
- **Secondary endpoints (axi-cel vs SOC)**

- ORR: 83% vs 50%
- Median OS: NR vs 35.1 mo (HR 0.73)
- Median PFS: 14.7 vs 3.7 mo (HR 0.49)

- **Safety**

- Axi-cel–related CRS
 - Any grade: 92%; grade ≥ 3 : 6%
 - Median onset 3 days, median duration 7 days
- Neurotoxicity
 - Most common: tremor, confusional state, aphasia
 - Any grade: 60% vs 20%; grade ≥ 3 : 21% vs 1%

ZUMA-7 (axi-cel): Overall Survival



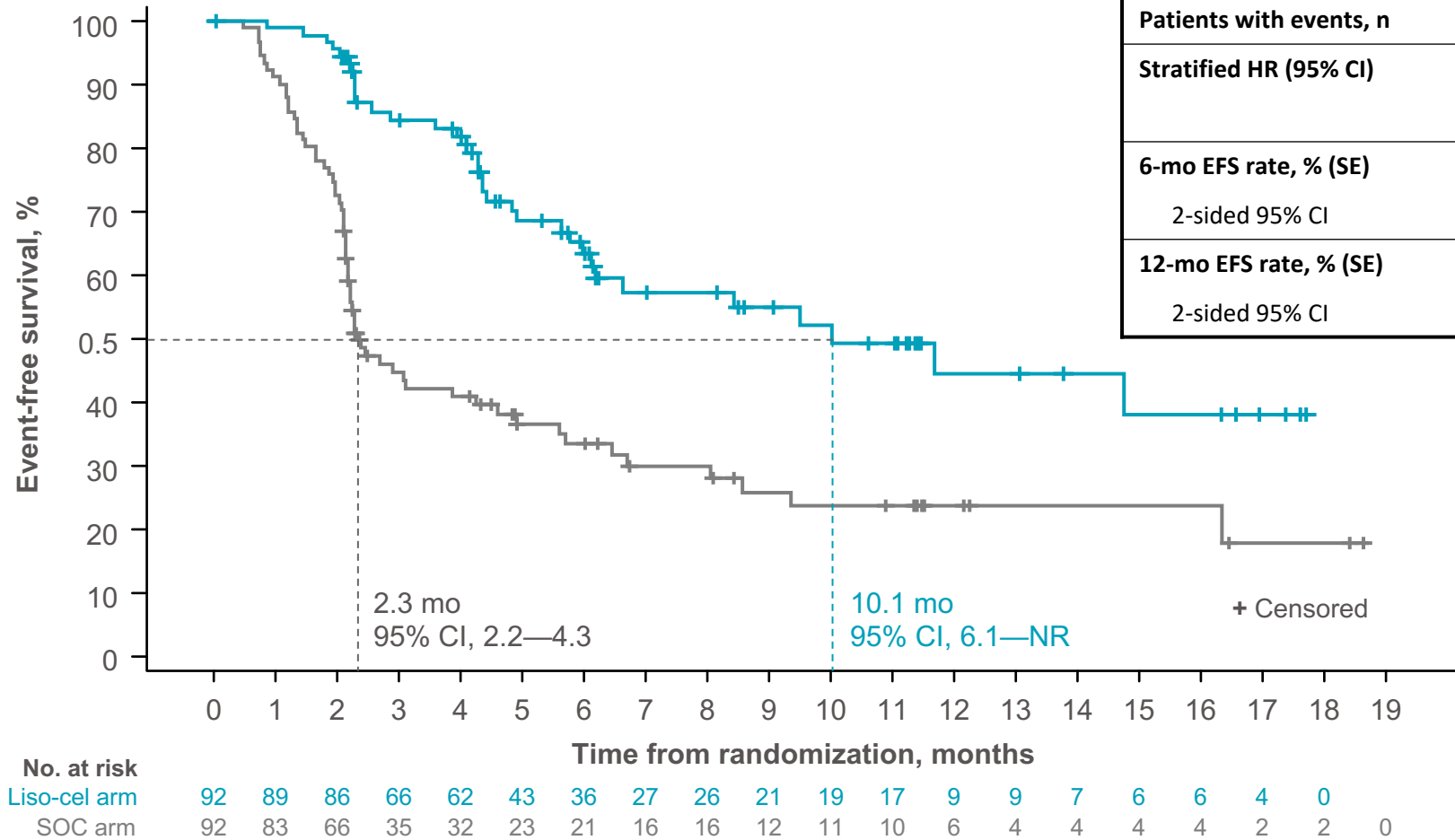
Median Follow-up, 47.2 mo

Axi-cel was associated with improved QoL by PRO

No. at Risk	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62
Axi-cel	180	177	170	161	157	147	136	125	117	116	114	111	108	105	105	100	100	100	100	100	96	80	67	54	41	29	20	14	4	2	1	0
Standard care	179	176	163	149	134	121	111	106	101	98	91	89	88	87	87	85	83	81	79	78	73	63	51	41	31	19	14	7	4	1	0	

TRANSFORM (liso-cel): Primary Endpoint

Median follow-up in both arms: 6.2 mo



	Liso-cel Arm (n = 92)	SOC Arm (n = 92)
Patients with events, n	35	63
Stratified HR (95% CI)	0.349 (0.229–0.530) <i>P</i> < .0001	
6-mo EFS rate, % (SE)	63.3 (5.77)	33.4 (5.30)
2-sided 95% CI	52.0–74.7	23.0–43.8
12-mo EFS rate, % (SE)	44.5 (7.72)	23.7 (5.28)
2-sided 95% CI	29.4–59.6	13.4–34.1

TRANSFORM (liso-cel)

■ Secondary endpoints (liso-cel vs SOC)

- ORR: 86% vs 48%
- Median OS: NR vs 16.4 mo (HR 0.51)
 - NR vs 29.9 months
- Median PFS: 14.8 vs 5.7 mo (HR 0.41)

■ Safety

- Liso-cel–related CRS
 - Any grade: 49%; grade ≥ 3 : 1%
 - Median onset 5 days, median duration 4 days
- Neurologic events
 - Grade 3 events include encephalopathy, mental status change, aphasia, tremor, muscular weakness
 - Any grade: 12%; grade ≥ 3 : 4%

EPCORE NHL-1 Phase 2 Study of Epcoritamab in Patients With R/R LBCL: Study Design¹⁻³

Dose escalation

Dose expansion data cutoff: November 18, 2022
Median follow-up: 20.0 mo

Key Inclusion Criteria

- R/R CD20⁺ mature B-cell neoplasm
- ECOG PS 0-2
- ≥2 prior lines of antineoplastic therapy, including ≥1 anti-CD20 mAb
- FDG PET-avid and measurable disease by CT/MRI
- Prior CAR T-cell therapy allowed

Step-up dosing^a

Epcoritamab SUBQ
RP2D 48 mg
qw C1-3,
q2w C4-9,
q4w C10+

Treatment until PD^{b,c} or
unacceptable toxicity

LBCL Cohort
N=157
DLBCL, HGBCL, PMBCL, and
FL Gr3B

- To ensure patient safety and better characterize CRS, inpatient monitoring was required at first full dose for 24 h in this part of the study
- **Primary endpoint:** ORR by IRC
- **Key secondary endpoints:** DOR, TTR, PFS, OS, CR rate, safety/tolerability

^a Step-up dosing (priming 0.16 mg and intermediate 0.8 mg dosing before first full dose) and corticosteroid prophylaxis were used to mitigate CRS. ^b Radiographic disease evaluation was performed every 6 weeks for the first 24 weeks (6, 12, 18, and 24 weeks), then every 12 weeks (36 and 48 weeks), and every 6 months thereafter. ^c Measurable disease with CT or MRI scan with involvement of ≥2 lesions/nodes with a long axis >1.5 cm and short axis >1.0 cm (or 1 lesion/node with a long axis >2.0 cm and short axis ≥1.0 cm) and FDG PET scan that demonstrates positive lesion(s) compatible with CT-defined (or MRI-defined) anatomical tumor sites for FDG-avid lymphomas.

EPCORE NHL-1 Phase 2 Study of Epcoritamab in Patients With R/R LBCL: Efficacy

Best response rates²

- CR: 39.0%
- ORR: 63.0%

Subgroup CR rate²

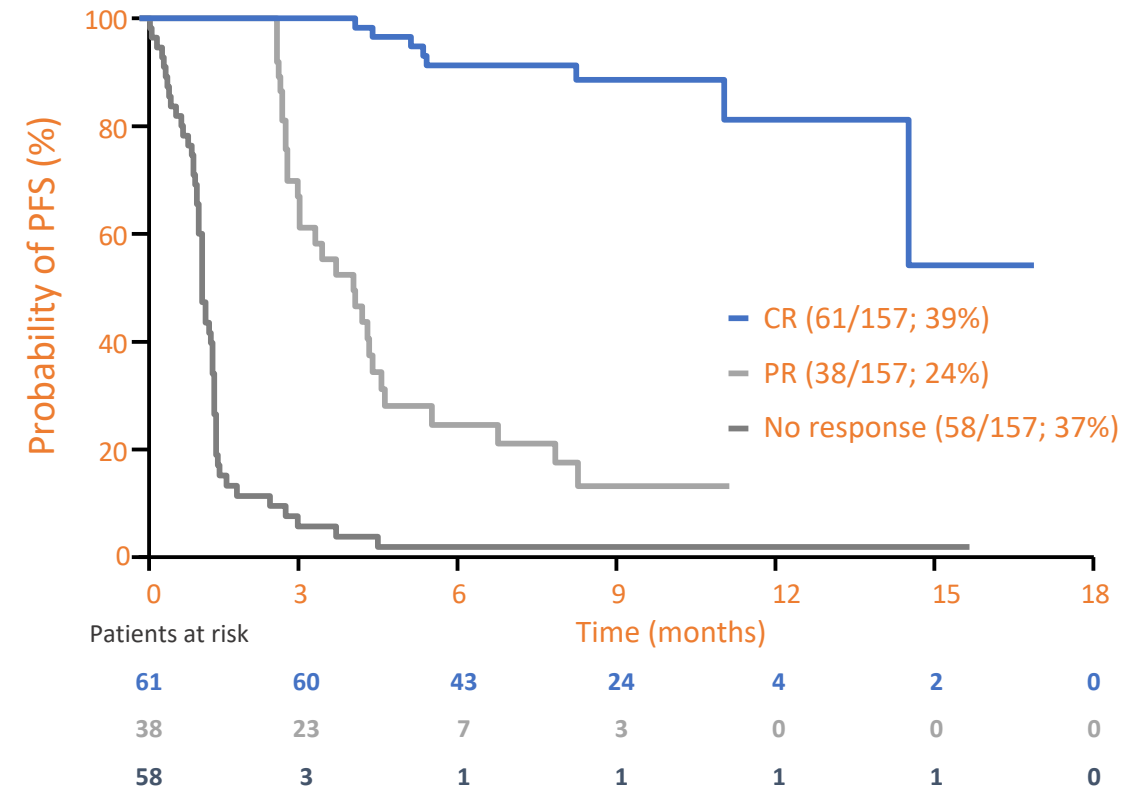
- After CAR T cell: 34%
- Refractory: 30%

Survival

- Median PFS: 4.4 mo²
- OS: 57% at 12 mo¹
- Median DOR: 12 mo²
- Median DOR of CR: NR²

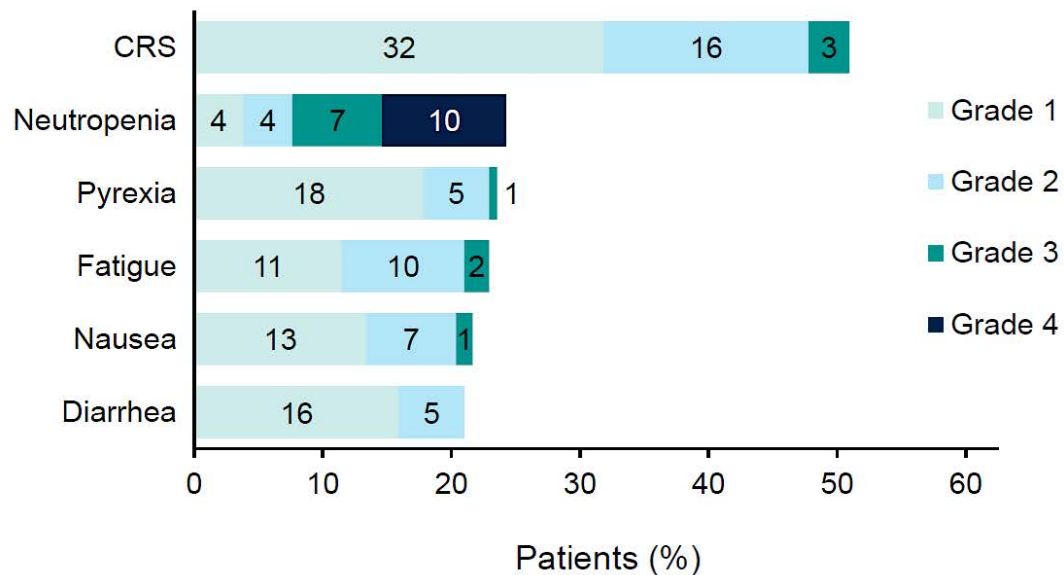
Kaplan-Meier Estimate	DLBCL (n=55)
Median DOR for patients who achieved a CR, mo (95% CI)	20.8 (17.3-NR)
Median PFS for patients who achieved a CR, mo (95% CI)	NR (18.5-NR)
Median OS for patients who achieved a CR, mo (95% CI)	NR (NR-NR)
Median OS for all patients with DLBCL, mo (95% CI) ^c	19.4 (11.7-NR)

PFS in Patients with LBCL²

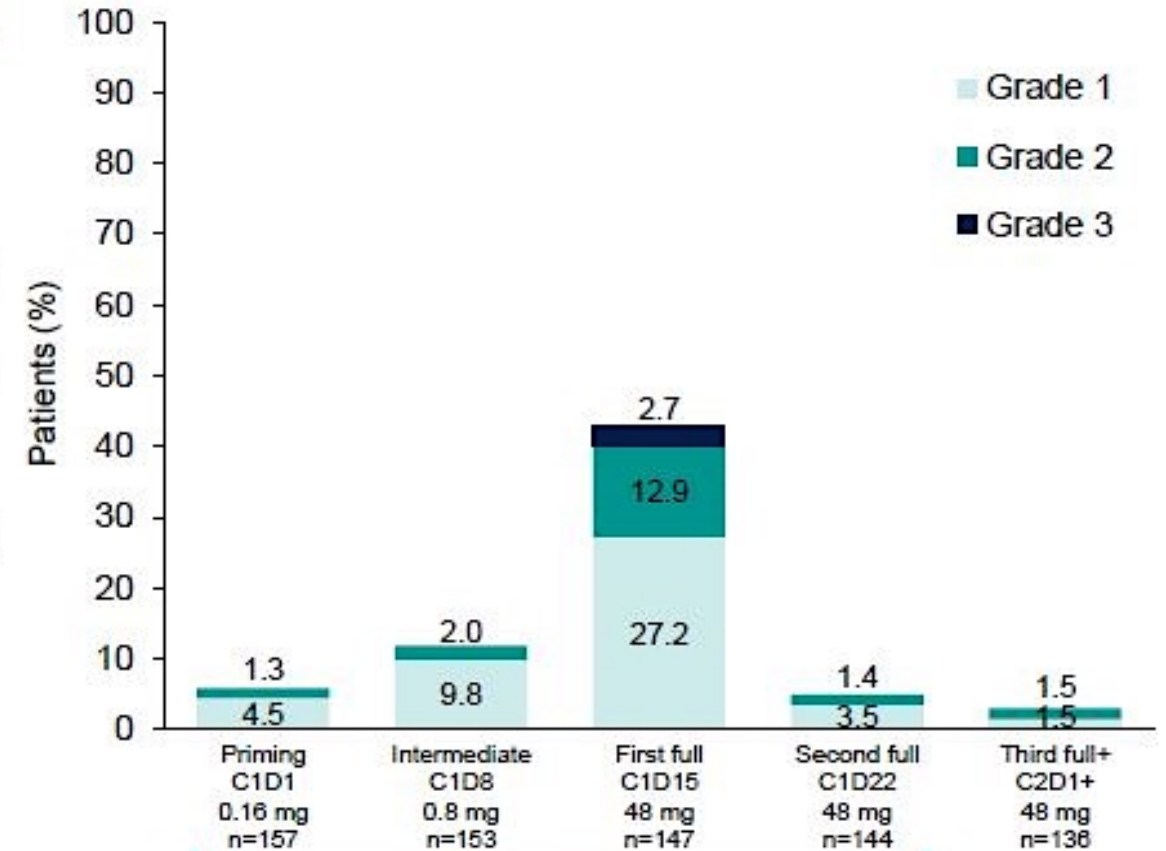


EPCORE NHL-1 Phase 2 Study of Epcoritamab in Patients With R/R LBCL: Safety

Treatment-Emergent Adverse Events (≥20%) of Patients with LBCL (N=157)



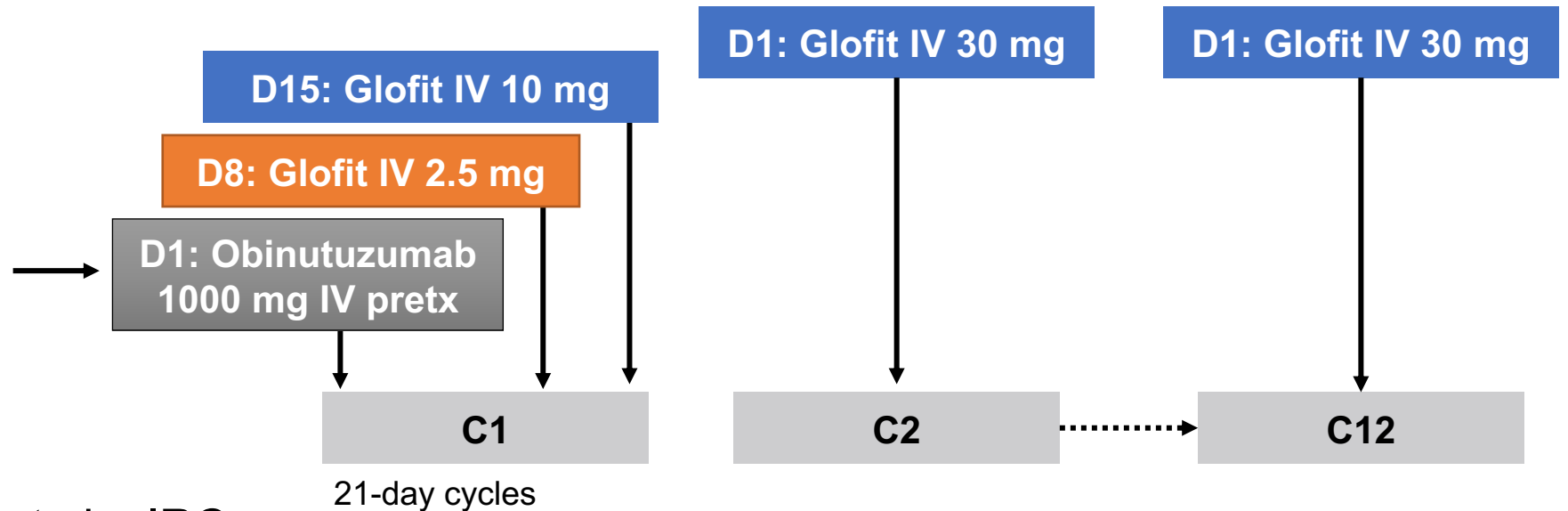
CRS Events by Dosing Period



Phase II Expansion Study: Glofitamab in R/R DLBCL

- Single-arm phase II expansion trial

Patients with DLBCL-NOS, HGBCL, transformed FL, or PMBCL; ECOG PS 0-1 and ≥ 2 prior therapies, including anti-CD20 and anthracycline (N = 155)

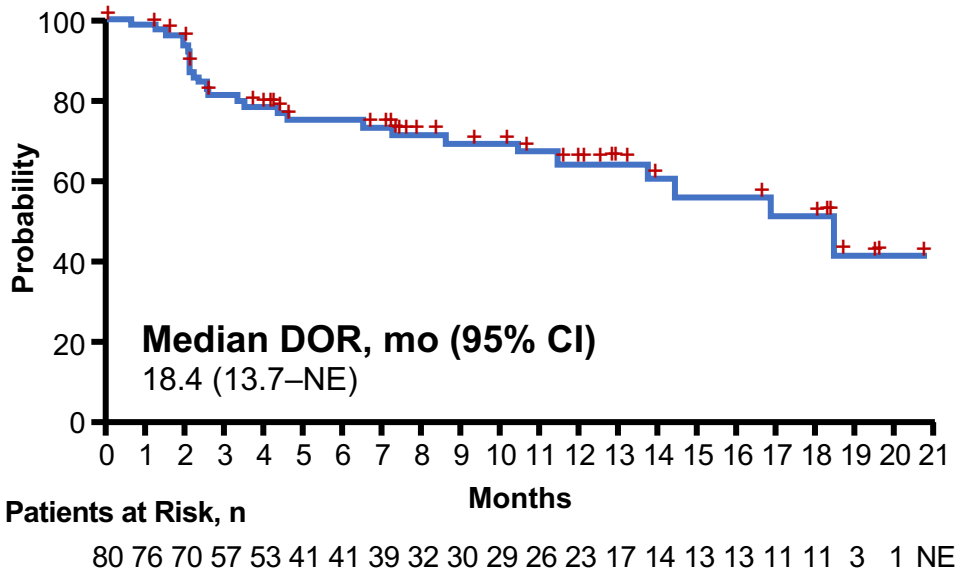


- Primary endpoint: CR rate by IRC
- Key secondary endpoints: ORR rate, DoR, DoCR, PFS, and OS

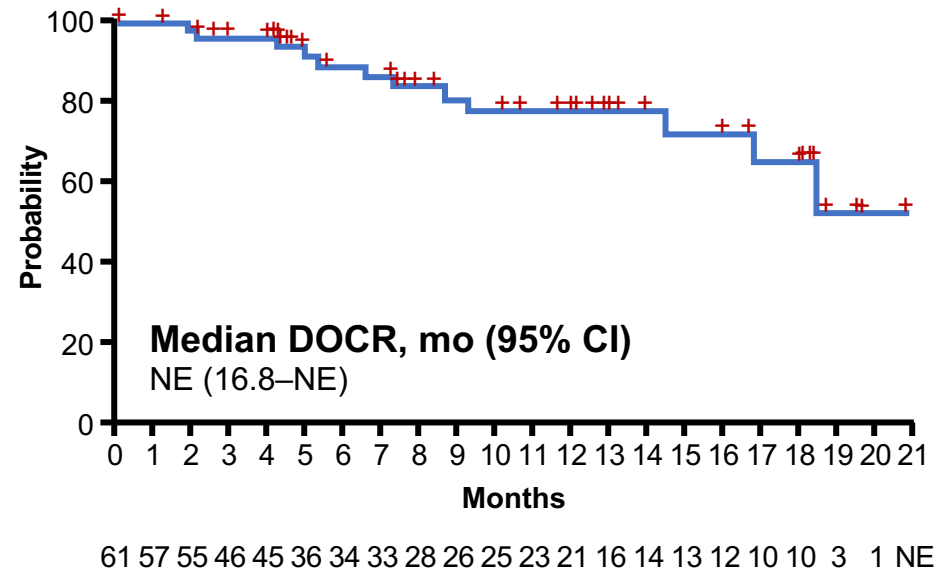
Phase II Expansion Study of Glofitamab: Efficacy

Median follow-up: 12.6 mo

Duration of overall response by IRC



Duration of complete response by IRC



	N = 80
Median DOR follow-up, mo (range)	10.6 (0–21)
12-mo DOR, % (95% CI)	63.6 (51.1–76.2)
Ongoing response at CCOD, n (%)	53 (66.3)

	n = 61
Median DOCR follow-up, mo (range)	10.6 (0–21)
12-mo DOCR, % (95% CI)	77.6 (64.3–90.8)
CRs ongoing at CCOD, n (%)	49 (80.3)

Response, %	N = 155
Best response	
▪ ORR	51.6
▪ CR	39.4
Subgroup CR rate	
▪ After CAR T-cell therapy	35
▪ Relapsed	70
▪ Refractory	34
Survival, Mo	N = 155
Median PFS	4.9
Median OS	11.5

Median F/U 32 mos

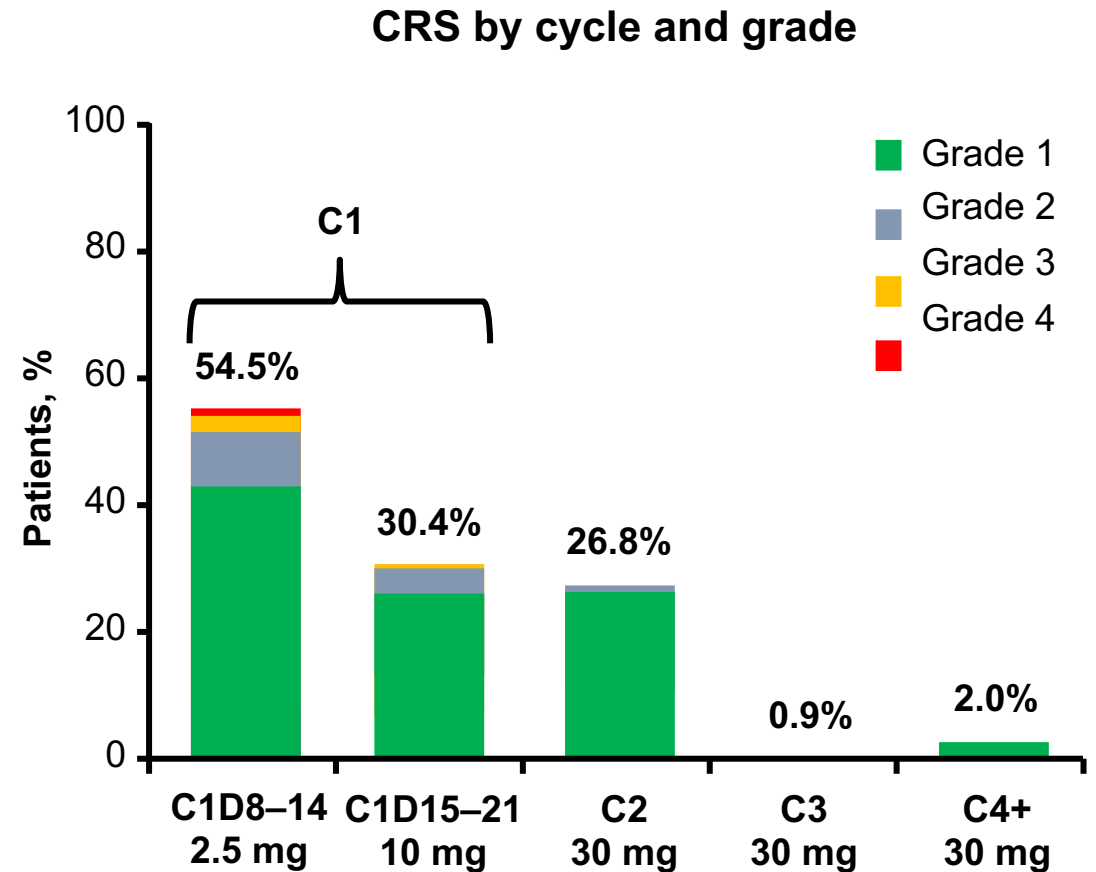
Median DOCR 26.9 mo

Median PFS 24 mo

Median OS NE

Phase II Expansion Study of Glofitamab: Safety

CRS Parameter	Glofitamab (N = 154)
Any-grade CRS, n (%)	97 (63.0)
▪ Grade 1	73 (47.4)
▪ Grade 2	18 (11.7)
▪ Grade 3	4 (2.6)
▪ Grade 4	2 (1.3)
Median time to CRS onset from C1D8 dose, hr (range)	13.6 (6.2–51.8)
Corticosteroids given, n/N (%)	27/97 (27.8)
Tocilizumab given, n/N (%)	31/97 (32.0)
Any ICANS, n (%)	12 (7.8)
▪ Grade ≥3	4 (2.6)

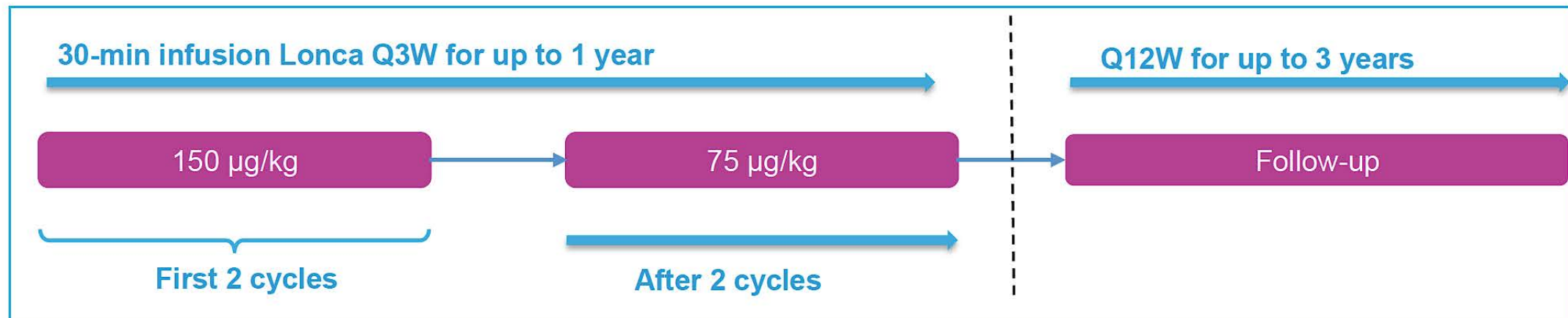


Loncastuximab Tesirine: LOTIS-2 Trial

Single-Arm Open-Label Phase II Study in DLBCL

Patient population:
Patients with R/R DLBCL following ≥ 2 lines of prior systemic therapy

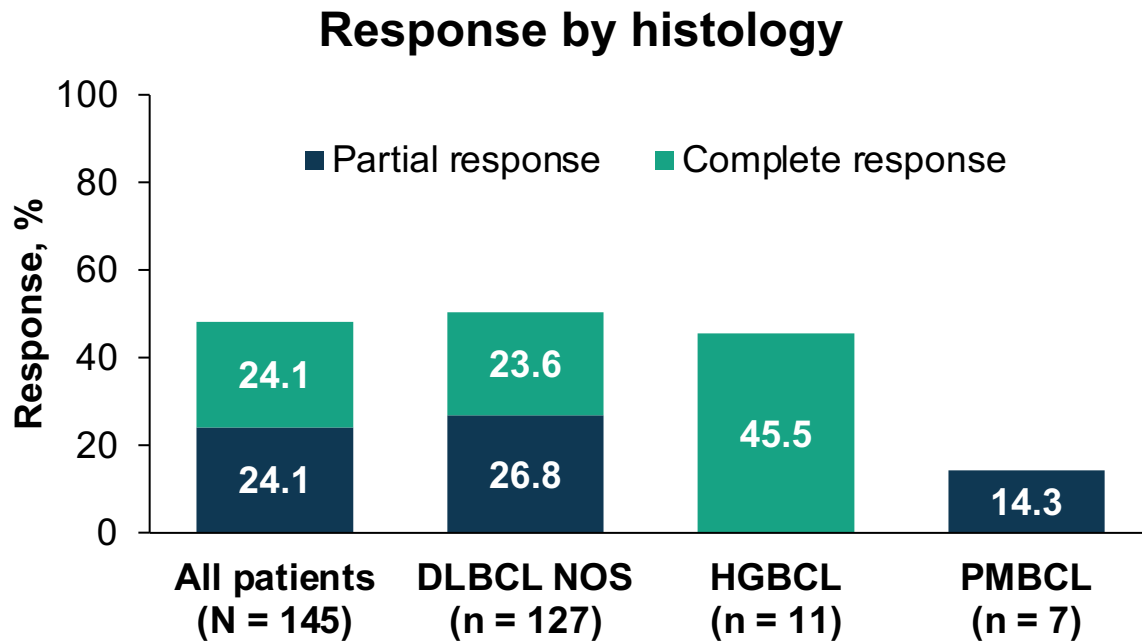
Primary objective:
Evaluate efficacy, using ORR (central review), and safety of the full Phase 2 study population



Key inclusion criteria: transplant-eligible and -ineligible patients; DLBCL NOS; DLBCL arising from low-grade lymphoma; HGBCL with *MYC* and *BCL2* and/or *BCL6* rearrangements; ECOG PS 0–2; patients with prior CD19-directed therapy if CD19 positive.

Loncastuximab Tesirine: CD19 ADC

- Median 3 prior therapies (range, 2–7)
- Primary refractory, n = 29 (20%)
- Double/triple hit, n = 15 (10.3%)
- Prior ASCT, n = 21 (14.5%)

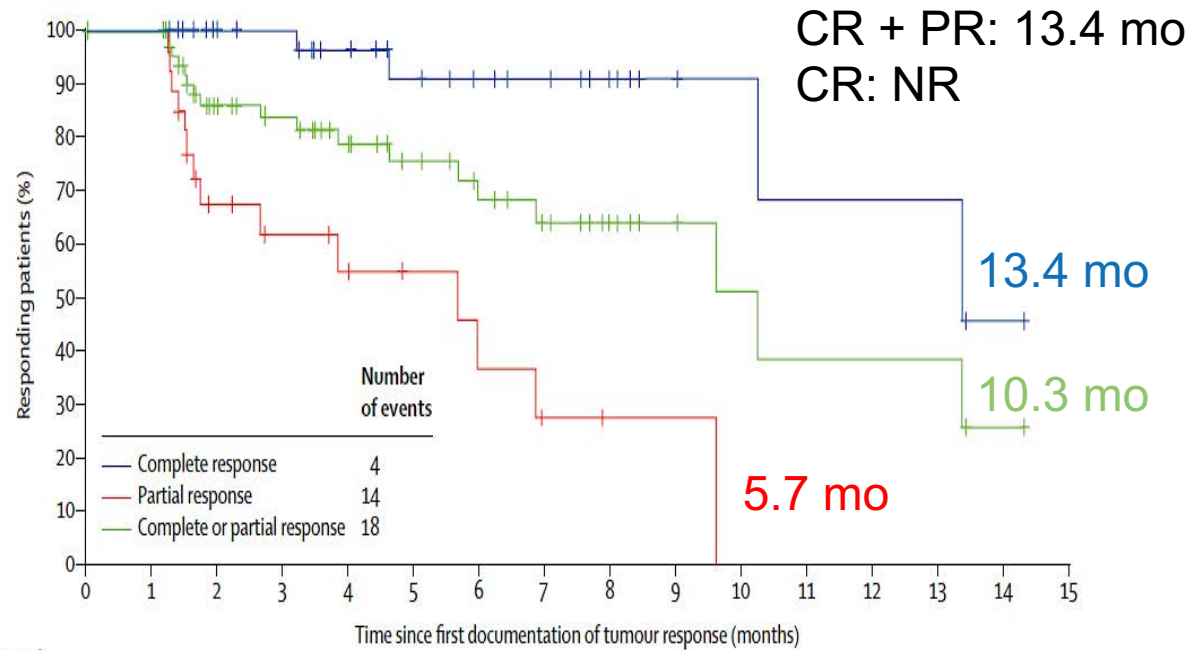


	N = 145 (%)
Overall response rate	70 (48.3)
Complete response	35 (24.1)
Partial response	35 (24.1)
Stable disease	22 (15)
Progressive disease	53 (37)
Median PFS	4.9 mo
Median overall survival	9.9 mo
Median DOR	10.3 mo

Activity across high-risk subgroups

- Refractory Disease
- High Grade B Cell
- Prior ASCT
- Prior CAR-T

LOTIS-2: Duration of Response and Safety



Number at risk
(number censored)

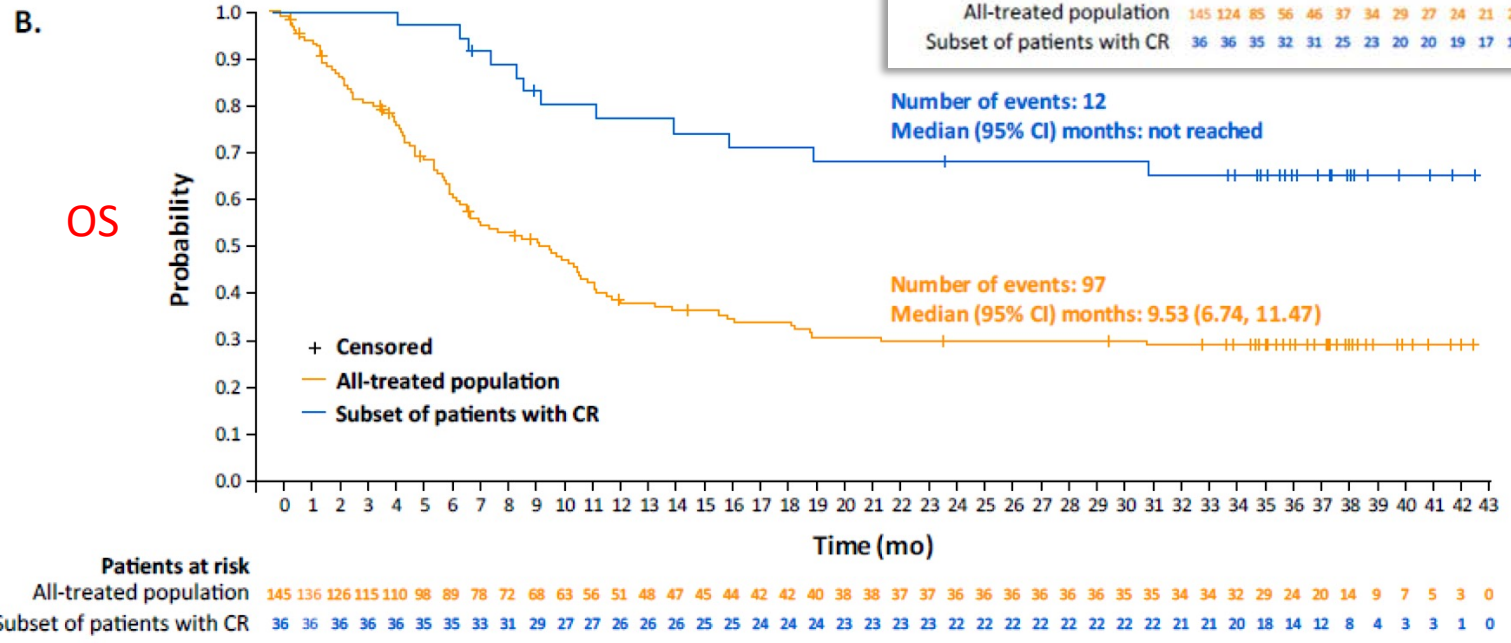
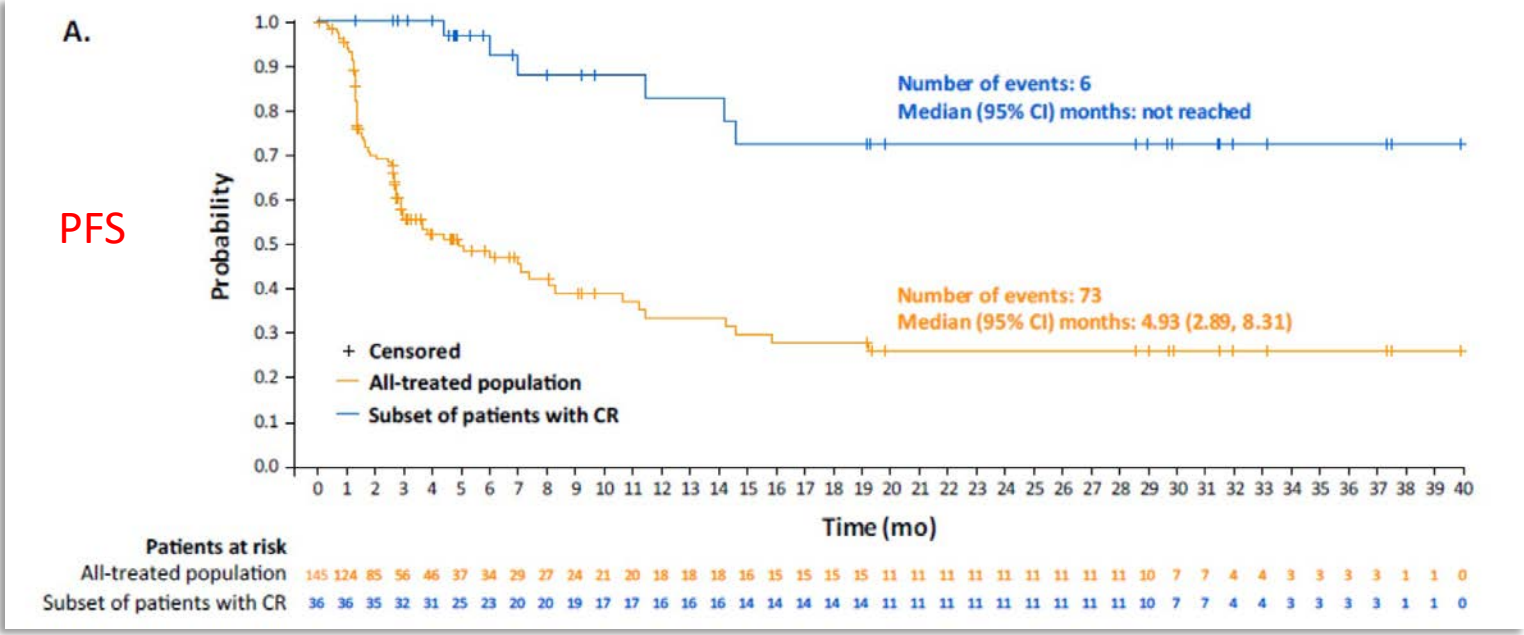
Complete response	35 (0)	34 (1)	28 (7)	26 (9)	21 (13)	17 (16)	14 (19)	12 (21)	8 (25)	5 (28)	4 (29)	3 (29)	3 (29)	3 (29)	1 (30)	0 (31)
Partial response	35 (0)	28 (7)	13 (14)	10 (16)	8 (17)	6 (19)	4 (19)	2 (20)	1 (20)	1 (21)	0 (21)	0 (21)	0 (21)	0 (21)	0 (21)	0 (21)
Complete or partial response	70 (0)	62 (8)	41 (21)	36 (25)	29 (30)	23 (35)	18 (38)	14 (41)	9 (46)	6 (49)	4 (50)	3 (50)	3 (50)	3 (50)	1 (51)	0 (52)

Adverse Event	Patients, n (%)
Any TEAE	143 (98.6)
GGT increased	59 (40.7)
Neutropenia	57 (39.3)
Thrombocytopenia	48 (33.1)
Fatigue	40 (27.6)
Anemia	38 (26.2)
Nausea	34 (23.4)
Cough	32 (22.1)
Alkaline phosphatase increased	29 (20.0)
Peripheral edema	29 (20.0)

16 (44%) patients had CRs >1 yr, which were ongoing at the 1-yr follow-up, and 11 (31%) had CRs >2 yr

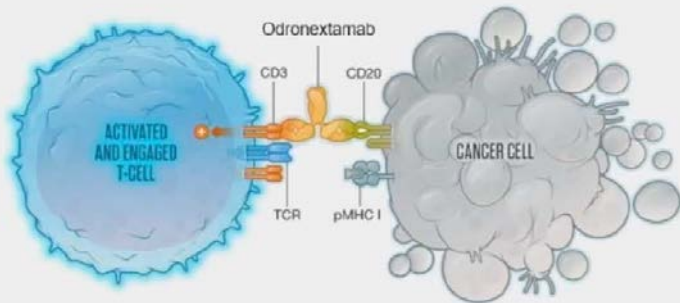
- TEAE (related) leading to treatment discontinuation: 27 (18.6%)
- Treatment delays: 62 (42.8%)

Loncastuximab Tesirine: Updated Results



ELM-2: Odronextamab for R/R DLBCL

Odronextamab mechanism of action
Fc-silenced, human, CD20×CD3 bispecific antibody



Binds CD20 on malignant B cells and CD3 on T cells, to elicit T-cell-mediated cytotoxicity

Key eligibility criteria

- DLBCL per WHO 2016 classification¹
- ECOG PS 0 or 1
- Refractory to or relapsed after ≥2 prior lines of therapy, including an anti-CD20 antibody and an alkylator

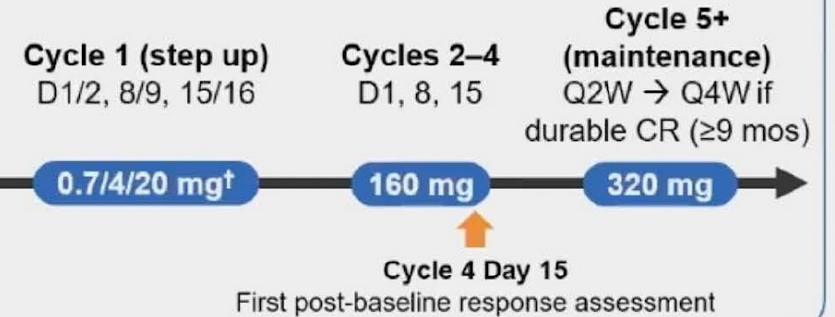
Primary endpoint: ORR* by ICR

Secondary endpoints:

- ORR* by local investigator
- CR*, DOR*, PFS*, and OS
- Safety and tolerability
- Patient-reported outcomes

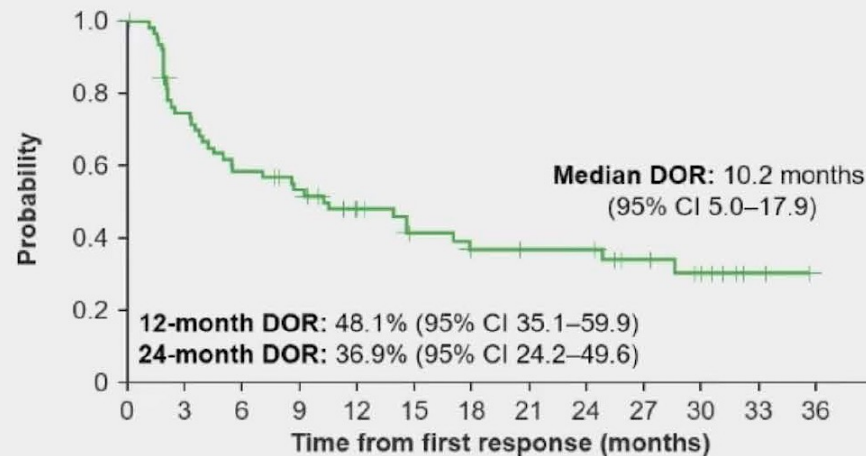
Key exploratory endpoint: MRD

Odronextamab administration (IV, 21-day cycles)



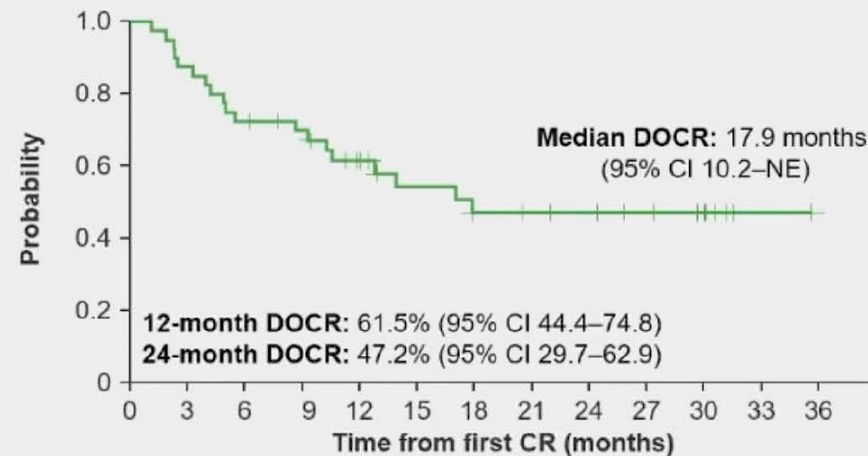
ORR = 52.0%; CR = 31.5%

DOR



No. at risk: 66 46 36 31 23 18 15 14 14 10 6 2 0

DOCR

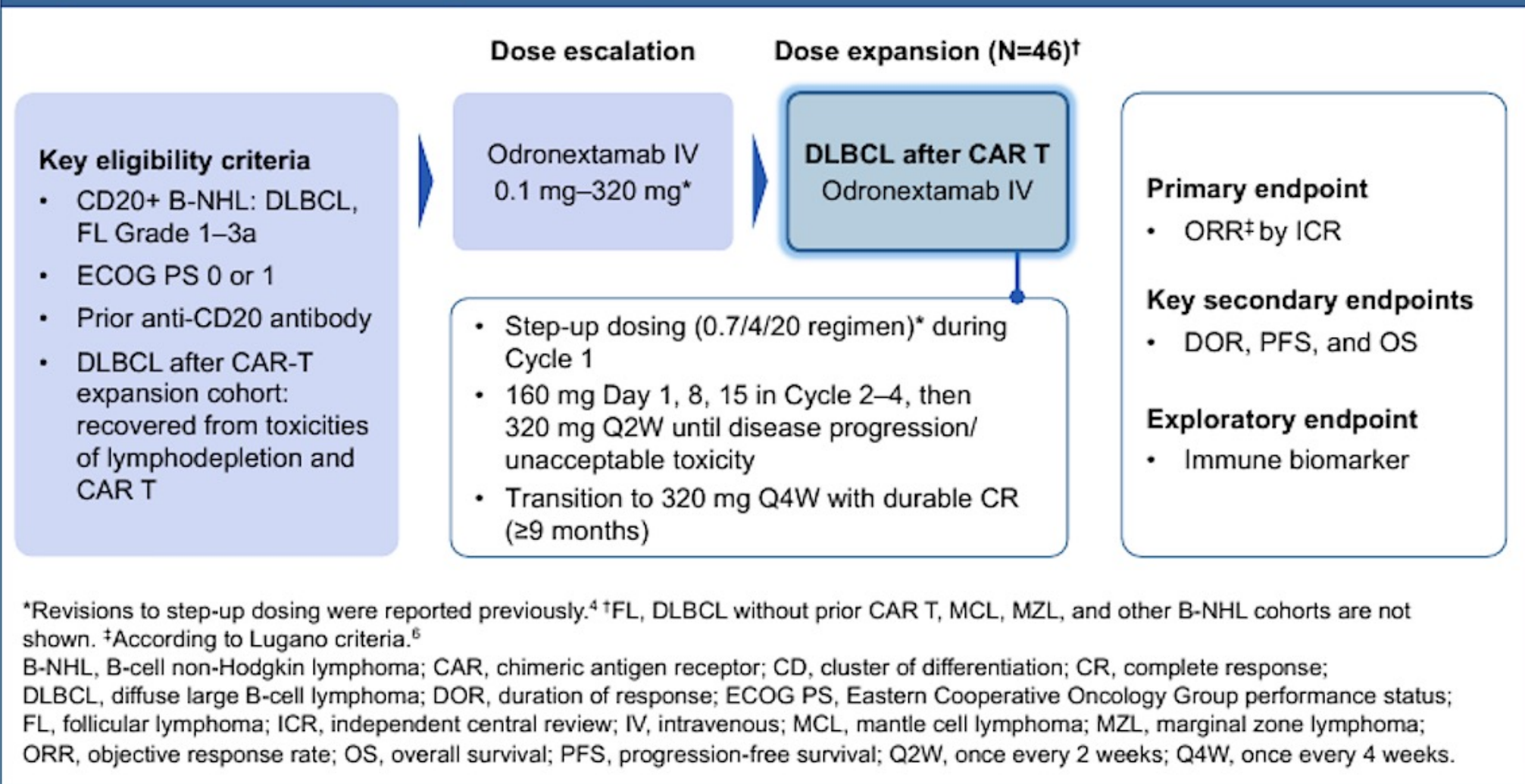


No. at risk: 40 35 29 26 19 15 12 11 10 8 5 1 0

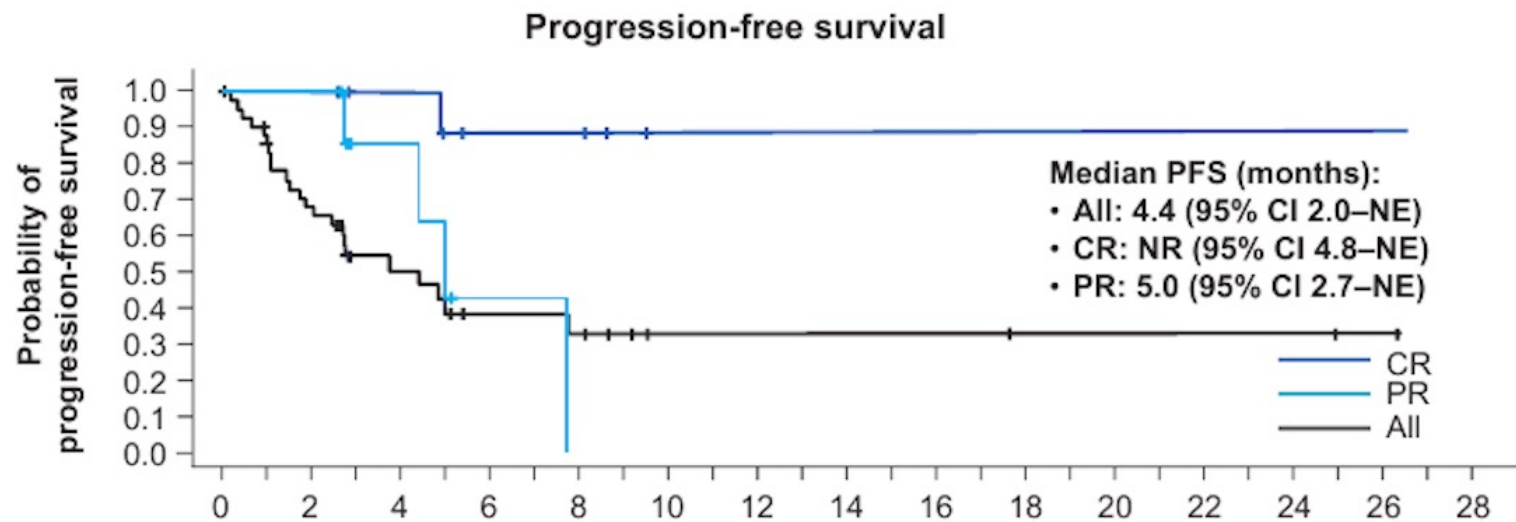
- The most common AE was CRS in 55.1% of patients and was mostly Grade 1-2.

ELM-1 Study: Odronextamab

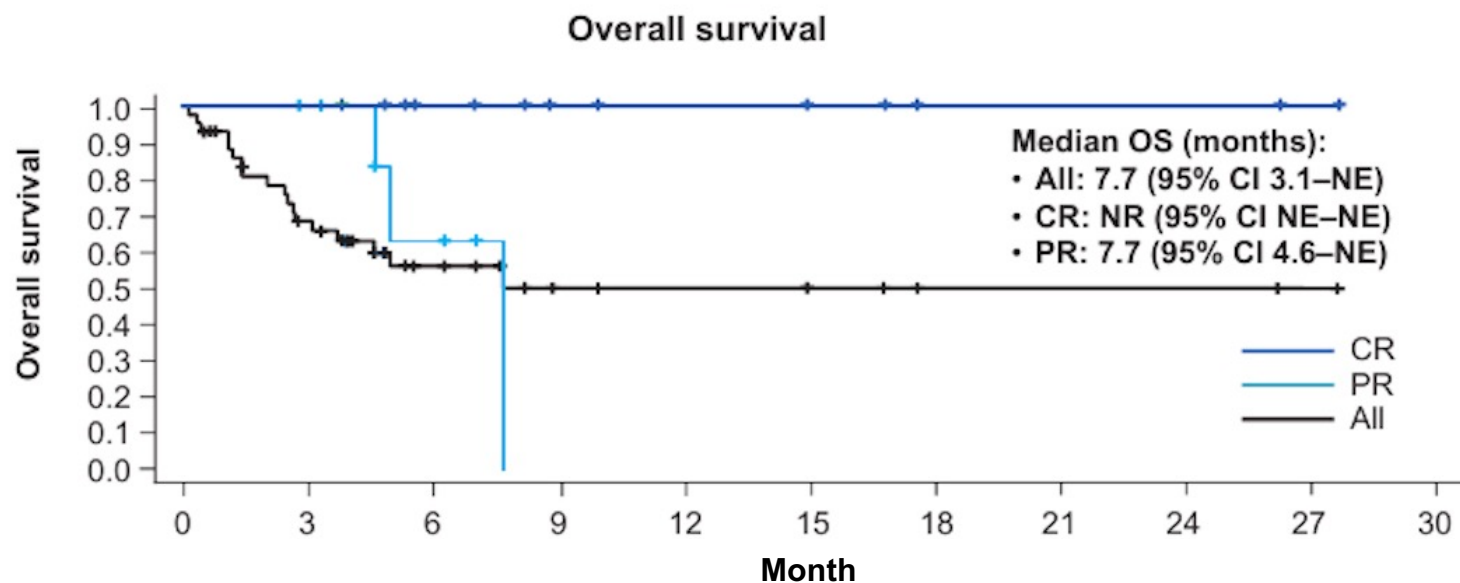
Figure 1. ELM-1 study design – DLBCL post CAR-T cohort



ELM-1: Odronextamab After CAR T-Cell Therapy



Response data	
ORR	47.7%
CR	29.5%



- The most common AE was CRS occurring in 52.3% of patients. All events were Grade 1-2 and resolved with a median time to resolution of 2 days.

The Annual National General Medical Oncology Summit

Saturday, March 23, 2024

Moderator

Neil Love, MD

Faculty

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Matthew D Galsky, MD

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Rana R McKay, MD

Bradley J Monk, MD

David M O'Malley, MD

Joyce O'Shaughnessy, MD

Brian Rini, MD

Jonathan E Rosenberg, MD

Hope S Rugo, MD

Helena Yu, MD

Andrew D Zelenetz, MD, PhD

We are taking a short break!

The program will resume at 9:30 AM ET

Up Next...

**Drs Bradley Monk and David O'Malley
discuss the management of gynecologic cancers**