Thank you for joining us.
The program will commence momentarily.

Recent Advances in Medical Oncology: Hodgkin and Non-Hodgkin Lymphomas

Monday, August 10, 2020

5:00 PM – 6:00 PM ET

Faculty

Jeremy Abramson, MD

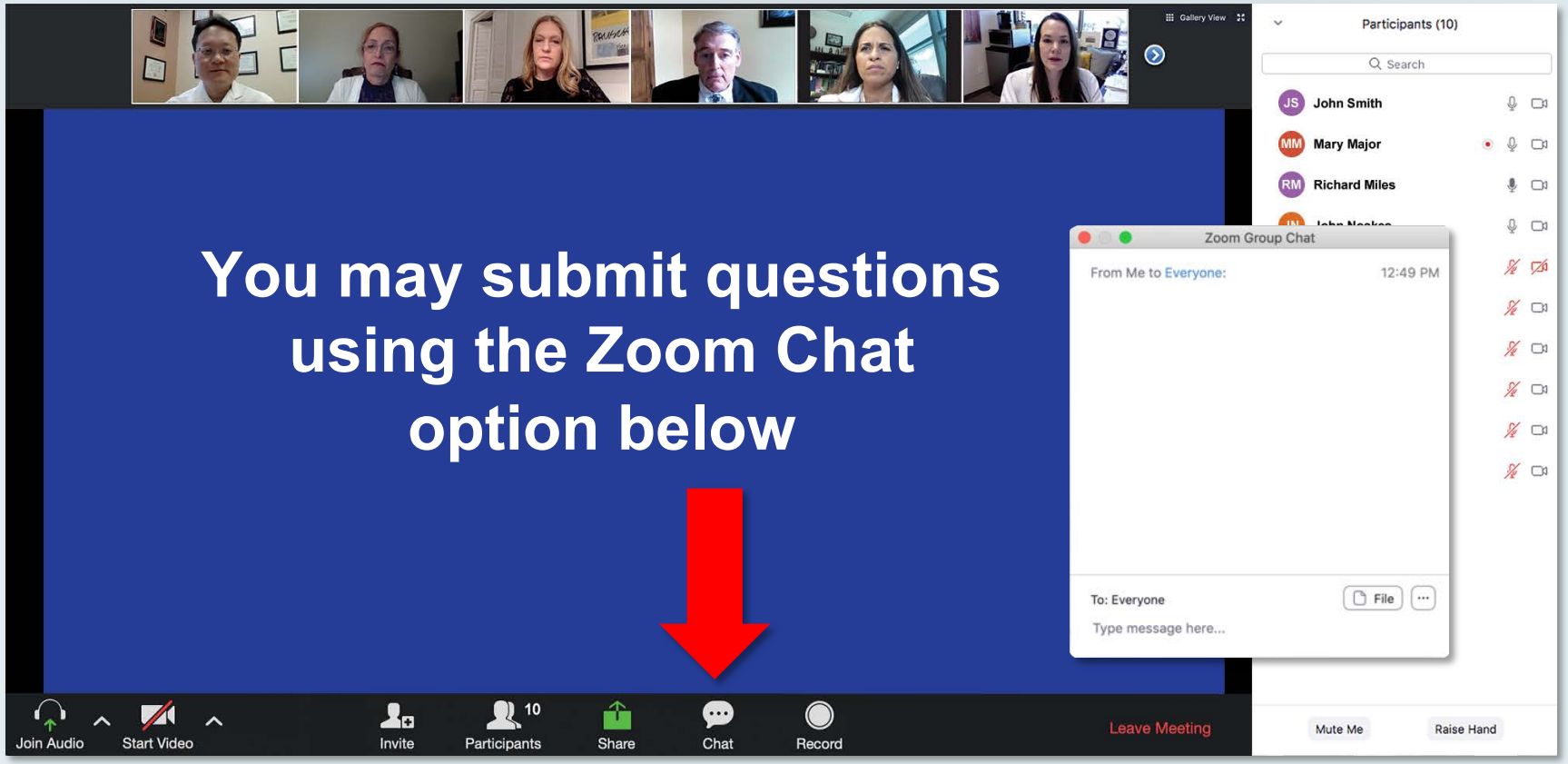
Christopher R Flowers, MD, MS

Moderator

Neil Love, MD

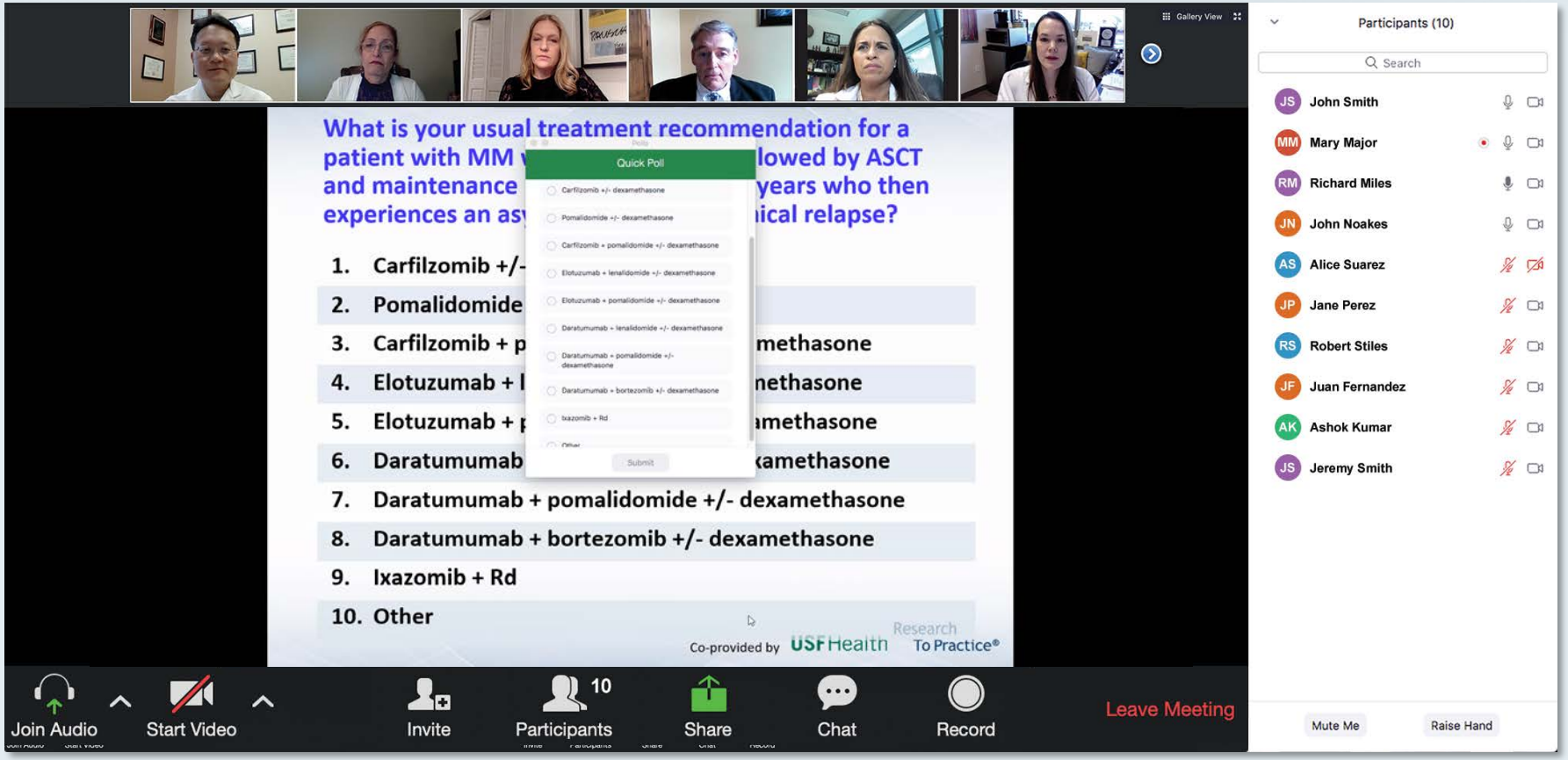
RTP RESEARCH TO PRACTICE

Dr Love and Faculty Encourage You to Ask Questions



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

Familiarizing yourself with the Zoom interface
How to answer poll questions



When a poll question pops up, click your answer choice from the available options. Results will be shown after everyone has answered.

Commercial Support

This activity is supported by educational grants from AbbVie Inc, Adaptive Biotechnologies Corporation, AstraZeneca Pharmaceuticals LP, Celgene Corporation, Genentech, a member of the Roche Group, Kite, A Gilead Company, Seattle Genetics and Verastem Inc.

Dr Love — Disclosures

Dr Love is president and CEO of Research To Practice. Research To Practice receives funds in the form of educational grants to develop CME activities from the following commercial interests: AbbVie Inc, Acerta Pharma — A member of the AstraZeneca Group, Adaptive Biotechnologies Corporation, Agendia Inc, Agios Pharmaceuticals Inc, Amgen Inc, Array BioPharma Inc, a subsidiary of Pfizer Inc, Astellas, AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Biodesix Inc, bioTheranostics Inc, Blueprint Medicines, Boehringer Ingelheim Pharmaceuticals Inc, Boston Biomedical Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, Daiichi Sankyo Inc, Dendreon Pharmaceuticals Inc, Eisai Inc, EMD Serono Inc, Exelixis Inc, Foundation Medicine, Genentech, a member of the Roche Group, Genmab, Genomic Health Inc, Gilead Sciences Inc, GlaxoSmithKline, Grail Inc, Guardant Health, Halozyme Inc, Helsinn Healthcare SA, ImmunoGen Inc, Incyte Corporation, Infinity Pharmaceuticals Inc, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc, Kite, A Gilead Company, Lexicon Pharmaceuticals Inc, Lilly, Loxo Oncology Inc, a wholly owned subsidiary of Eli Lilly & Company, Merck, Merrimack Pharmaceuticals Inc, Myriad Genetic Laboratories Inc, Natera Inc, Novartis, Oncopeptides, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Prometheus Laboratories Inc, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sandoz Inc, a Novartis Division, Sanofi Genzyme, Seattle Genetics, Sirtex Medical Ltd, Spectrum Pharmaceuticals Inc, Taiho Oncology Inc, Takeda Oncology, Tesaro, A GSK Company, Teva Oncology, Tokai Pharmaceuticals Inc, Tolero Pharmaceuticals and Verastem Inc.

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.

Dr Abramson — Disclosures

Consulting Agreements	AbbVie Inc, Allogene Therapeutics, AstraZeneca Pharmaceuticals LP, BeiGene, Celgene Corporation, Incyte Corporation, Karyopharm Therapeutics, Kite, A Gilead Company, MorphoSys, Novartis
Contracted Research	Bristol-Myers Squibb Company, Seattle Genetics

Dr Flowers — Disclosures

Consulting Agreements	AbbVie Inc, Bayer HealthCare Pharmaceuticals, BeiGene, Celgene Corporation, Denovo Biopharma, Genentech, a member of the Roche Group, Gilead Sciences Inc, Janssen Biotech Inc, Karyopharm Therapeutics, MEI Pharma Inc, Pharmacyclics LLC, an AbbVie Company, Spectrum Pharmaceuticals Inc
Contracted Research	AbbVie Inc, Acerta Pharma — A member of the AstraZeneca Group, Burroughs Wellcome Fund, Cancer Prevention and Research Institute of Texas, Celgene Corporation, Eastern Cooperative Oncology Group, Genentech, a member of the Roche Group, Gilead Sciences Inc, Janssen Biotech Inc, National Cancer Institute, Pharmacyclics LLC, an AbbVie Company, Takeda Oncology, TG Therapeutics Inc, V Foundation for Cancer Research

Upcoming Live Webinars

Tuesday, August 11, 2020
5:00 PM – 6:00 PM ET

Clinical Investigator Perspectives on the Current and Future Management of Multiple Myeloma

Faculty
Robert Z Orlowski, MD, PhD

Moderator
Neil Love, MD

Wednesday, August 12, 2020
1:00 PM – 2:00 PM ET

Meet The Professors
Clinical Investigators Discuss Existing and Emerging Treatment Strategies for Patients with Ovarian, Cervical and Endometrial Cancer

Faculty
Stephanie Lheureux, MD, PhD
Professor Ignace Vergote

Moderator
Neil Love, MD

Upcoming Live Webinars

Wednesday, August 12, 2020
5:00 PM – 6:30 PM ET

Recent Advances in Medical Oncology: Hepatocellular Carcinoma and Pancreatic Cancer

Faculty
Tanios Bekaii-Saab, MD
Eileen M O'Reilly, MD
Philip A Philip, MD, PhD, FRCP
Alan P Venook, MD

Moderator
Neil Love, MD

Friday, August 14, 2020
9:00 AM – 10:00 AM ET

Virtual Molecular Tumor Board: Recognition and Management of Targetable Tumor Mutations in Less Common Cancer Types

Faculty
Marcia S Brose, MD, PhD
Andrew McKenzie, PhD
Milan Radovich, PhD

Moderator
Neil Love, MD

Upcoming Live Webinars

Monday, August 17, 2020
5:00 PM – 6:00 PM ET

Recent Advances in Medical Oncology: ER-Positive Breast Cancer

Faculty
Virginia Kaklamani, MD, DSc
Sara M Tolaney, MD, MPH

Moderator
Neil Love, MD

ONCOLOGY TODAY

WITH DR NEIL LOVE

Listen on Apple Podcasts

Spotify®

Listen on Google Podcasts

Recent Advances in Medical Oncology: Hodgkin and Non-Hodgkin Lymphomas

Monday, August 10, 2020

5:00 PM – 6:00 PM ET

Faculty

Jeremy Abramson, MD

Christopher R Flowers, MD, MS

Moderator

Neil Love, MD

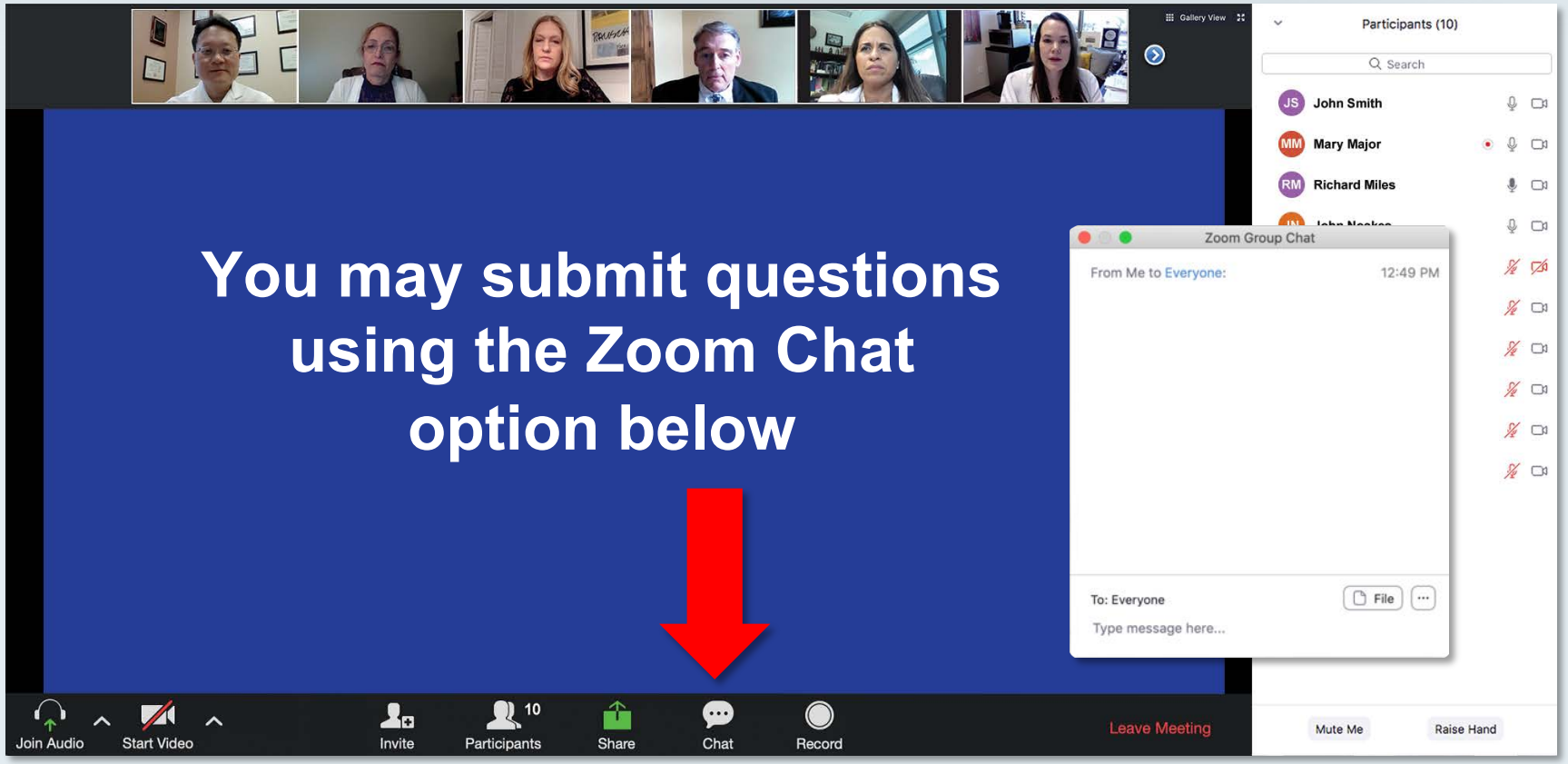
RTP RESEARCH TO PRACTICE

Faculty

Jeremy Abramson, MD
Director, Center for Lymphoma
Massachusetts General Hospital
Associate Professor of Medicine
Harvard Medical School
Boston, Massachusetts

Christopher R Flowers, MD, MS
Chair, Professor
Department of Lymphoma/Myeloma
The University of Texas
MD Anderson Cancer Center
Houston, Texas

Dr Love and Faculty Encourage You to Ask Questions



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

Clinical Investigator Perspectives on the Current and Future Management of Multiple Myeloma

A Meet The Professor Series

Tuesday, August 11, 2020

5:00 PM – 6:00 PM ET

Faculty

Robert Z Orlowski, MD, PhD

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

Meet The Professors

Clinical Investigators Discuss Existing and Emerging Treatment Strategies for Patients with Ovarian, Cervical and Endometrial Cancer

Wednesday, August 12, 2020

1:00 PM – 2:00 PM ET

Faculty

Stephanie Lheureux, MD, PhD
Professor Ignace Vergote

Moderator

Neil Love, MD

RTP
RESEARCH TO PRACTICE

Recent Advances in Medical Oncology: Hepatocellular Carcinoma and Pancreatic Cancer

Wednesday, August 12, 2020

5:00 PM – 6:30 PM ET

Faculty

Tanios Bekaii-Saab, MD
Eileen M O'Reilly, MD
Philip A Philip, MD, PhD, FRCP
Alan P Venook, MD

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

Virtual Molecular Tumor Board: Recognition and Management of Targetable Tumor Mutations in Less Common Cancer Types

Friday, August 14, 2020

9:00 AM – 10:00 AM ET

Faculty

Marcia S Brose, MD, PhD
Andrew McKenzie, PhD
Milan Radovich, PhD

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

Recent Advances in Medical Oncology: ER-Positive Breast Cancer

Monday, August 17, 2020

5:00 PM – 6:00 PM ET

Faculty

Virginia Kaklamani, MD, DSc
Sara M Tolaney, MD, MPH

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

ONCOLOGY TODAY

WITH DR NEIL LOVE

Listen on Apple Podcasts

Spotify®

Listen on Google Podcasts

About the Enduring Program

- This webinar is being video and audio recorded.
- The proceedings from today 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

Make the Meeting Even More Relevant to You

Download the RTP Live app on your smartphone or tablet to access program information, including slides being presented during the program:

www.ResearchToPractice.com/RTPLiveApp

Recent Advances in Medical Oncology: Hodgkin and Non-Hodgkin Lymphomas

Monday, August 10, 2020

5:00 PM – 6:00 PM ET

Faculty

Jeremy Abramson, MD

Christopher R Flowers, MD, MS

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

Agenda

MODULE 1: Diffuse Large B-Cell Lymphoma (DLBCL)

MODULE 2: Mantle Cell Lymphoma

MODULE 3: Hodgkin and T-Cell Lymphomas

MODULE 1: DLBCL

- **Faculty Cases – Dr Abramson**
  - A 74-Year-Old Woman with R/R Non-GCB Subtype DLBCL
  - A 47-Year-Old Man with R/R GCB Subtype DLBCL
  - **Key Relevant Data Sets**
    - FDA approval of polatuzumab vedotin + BR; ongoing POLARIX trial
    - Efficacy and safety of CAR T-cell therapies in DLBCL and MCL
    - TRANSCEND CLL 004: Lisocabtagene maraleucel in R/R disease
    - Recent FDA approval of selinexor in DLBCL

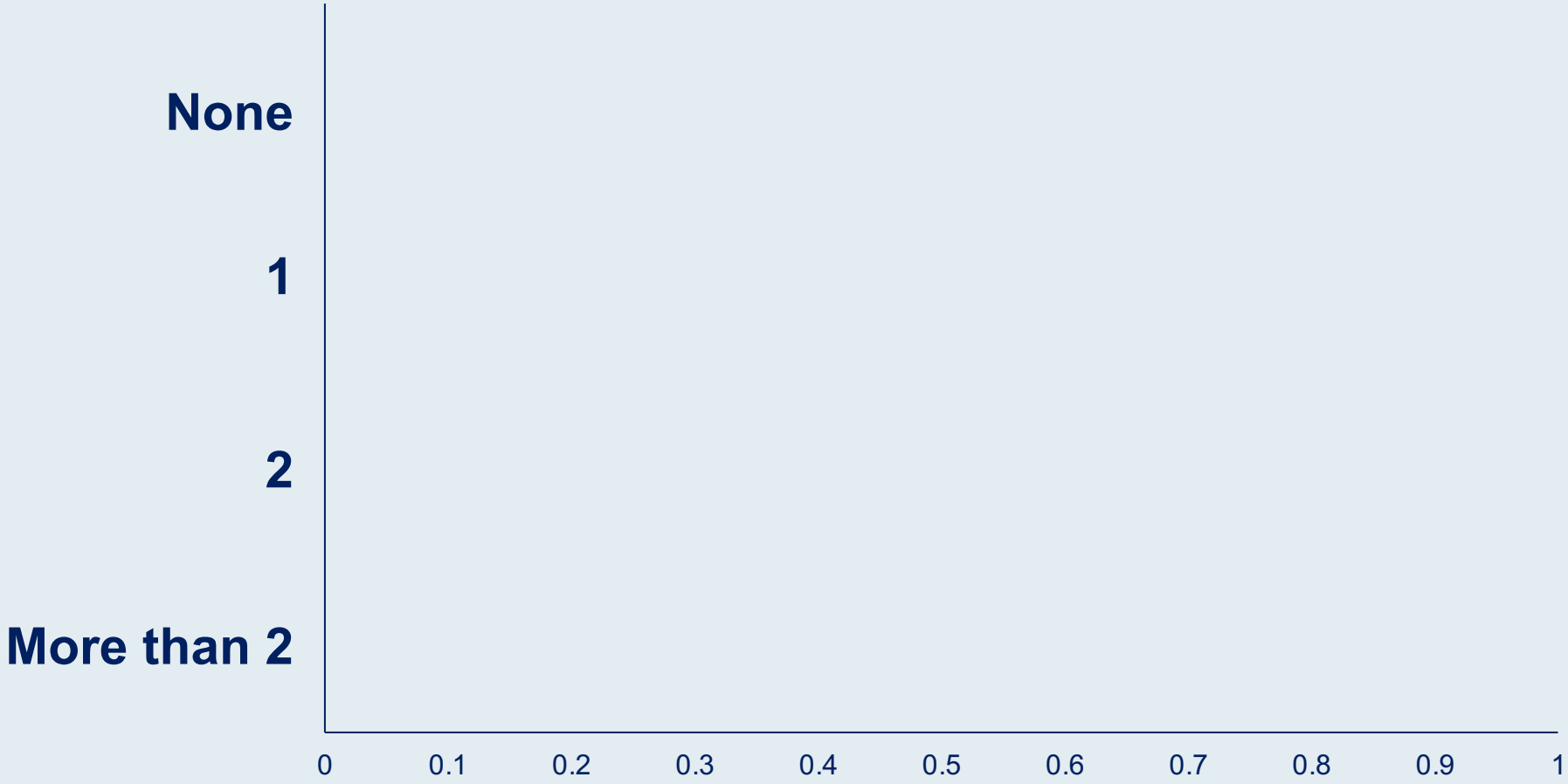
Case Presentation – Dr Abramson: A 74-Year-Old Woman with R/R Non-GCB Subtype DLBCL Attains a CR with CAR T-Cell Therapy

74yo woman with hypertension and CAD who presented with diffuse large B-cell lymphoma, stage III, non-GCB subtype, with co-expression of MYC and BCL2, but no translocations of MYC, BCL2 or BCL6. She was treated with R-CHOP and had a complete remission, but relapsed 3 months later with disease involving lymph nodes, liver, spleen, and skeleton. She was treated with 2 cycles of R-GemOx, without response. Her ECOG PS was 1, and she had a creatinine of 2.0. She received lymphodepleting chemotherapy (fludarabine was dose reduced for renal function) followed by tisagenlecleucel. She had grade 1 CRS and grade 1 confusion, both of which resolved without intervention. She entered a complete remission and remains in remission 14 months after tisa-cel treatment.

Case Presentation – Dr Abramson: A 47-Year-Old Man with R/R GCB Subtype DLBCL

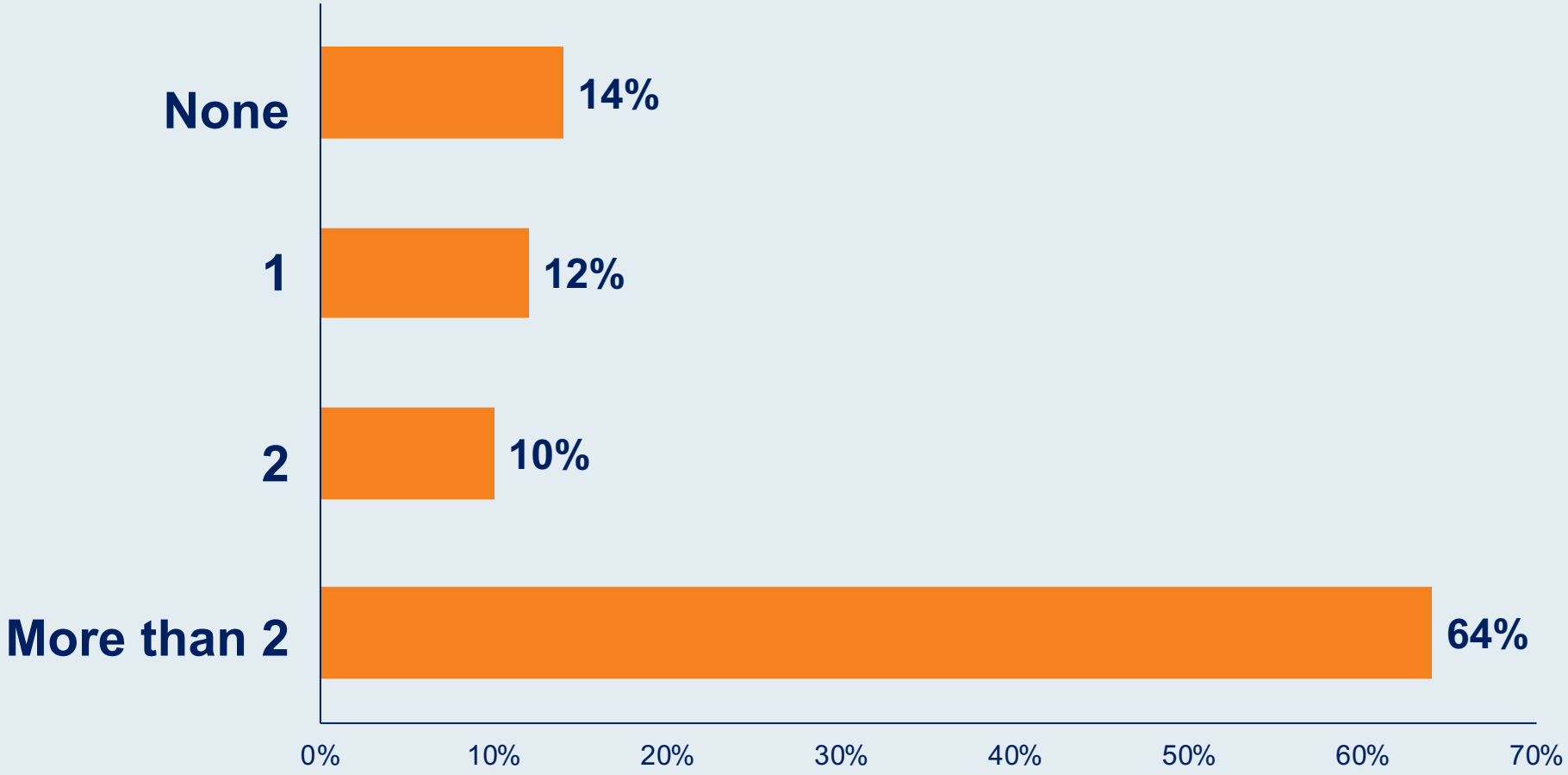
47yo man with diffuse large B-cell lymphoma, GCB subtype with MYC translocation but without translocations of BCL2 or BCL6. His disease was stage IV involving lymph nodes and multifocal bony sites. His IPI score was 3. He was initially treated with R-CHOP which he tolerated well and achieved a complete remission. He relapsed 18 months later and was treated with R-GDP to which he had a compete response and proceeded to a BEAM-conditioned ASCT. He relapsed 6 months later and at that time was treated with axicabtagene ciloleucel. He had grade 3 CRS and grade 3 encephelopathy treated with tocilizumab (x 2) and an extended course of dexamethasone. He achieved a complete response, but relapsed rapidly 3 months later. At that time he was treated with polatuzumab-BR and had clinical improvement and a partial response but progressed shortly after completing therapy. He is now being considered for a clinical trial of a bispecific monoclonal antibody.

Approximately how many patients with DLBCL have you referred for CAR T-cell therapy?



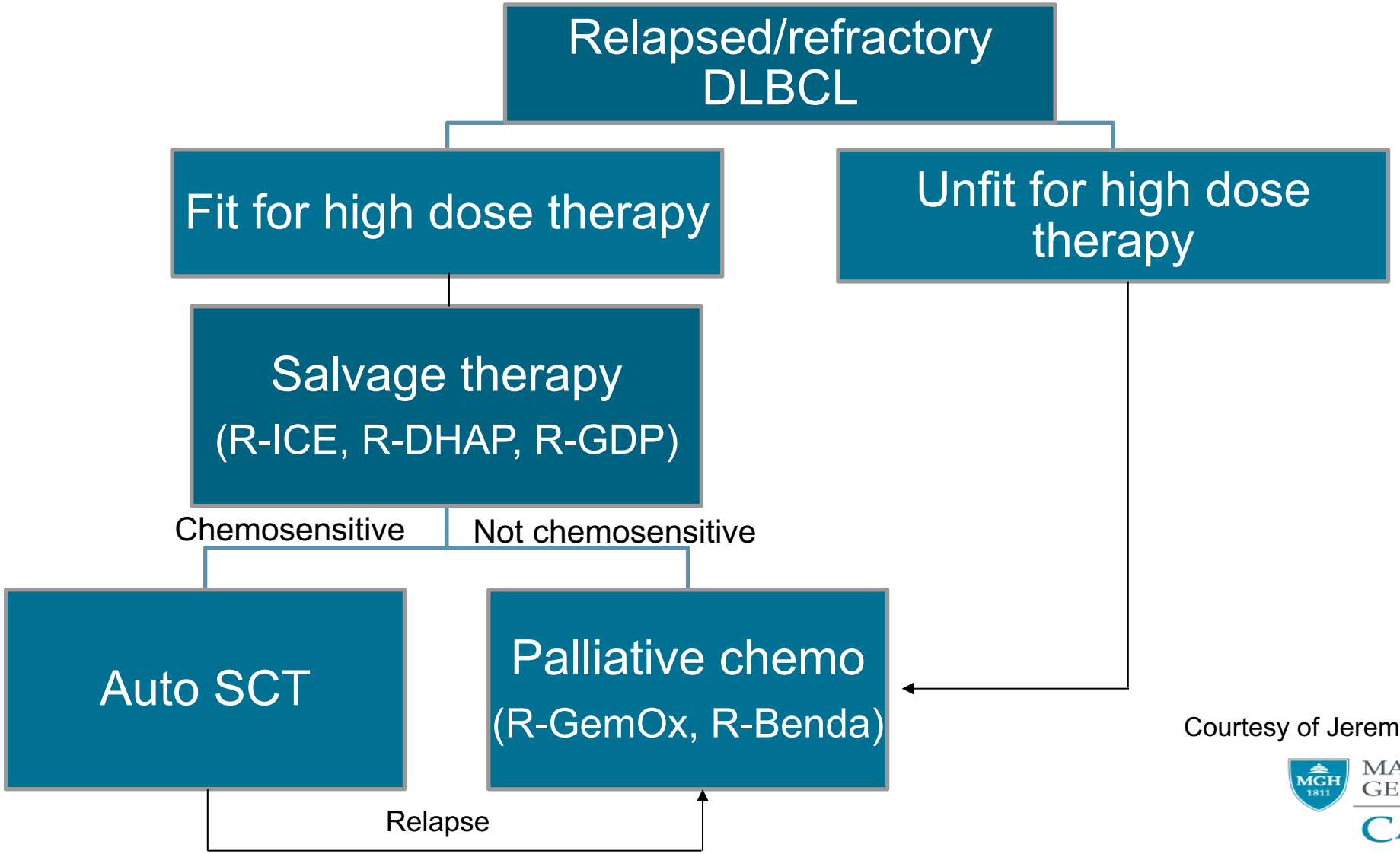
Survey of 50 US-based medical oncologists

Approximately how many patients with DLBCL have you referred for CAR T-cell therapy?



Survey of 50 US-based medical oncologists

Historic paradigm to approaching relapsed DLBCL



Courtesy of Jeremy S. Abramson, MD, MMSC

MASSACHUSETTS GENERAL HOSPITAL
CANCER CENTER

Three Major anti-CD19 CAR T-cell Products for Aggressive B-cell NHL

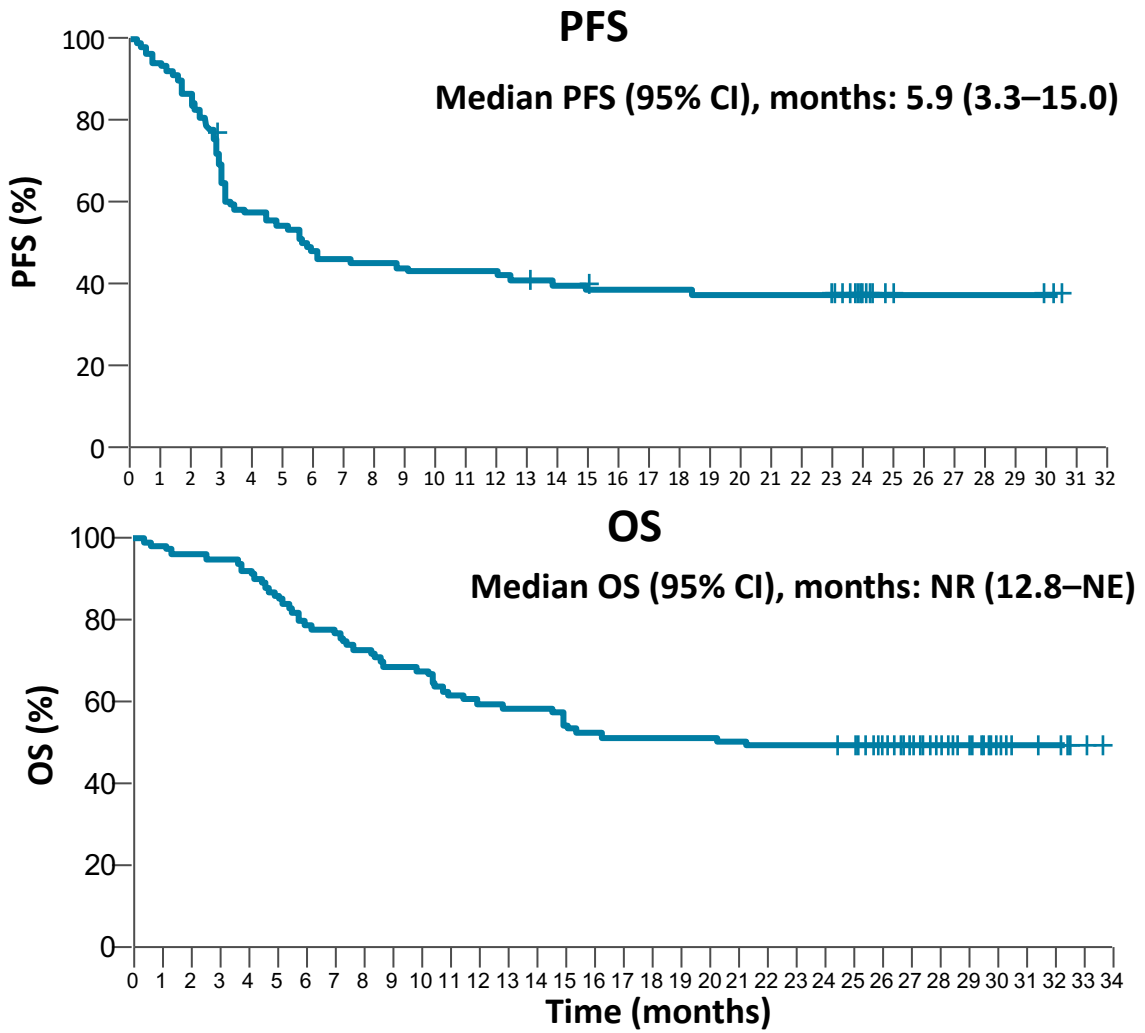
	Axicabtagene Ciloleucel	Tisagenlecleucel	Lisocabtagene Maraleucel
Construct	antiCD19-**CD28**-CD3z	antiCD19-**41BB**-CD3z	antiCD19-**41BB**-CD3z
Vector	Retrovirus	Lentivirus	Lentivirus
T-cell manufacturing	Bulk	Bulk	Defined doses CD4, CD8
Dose	2 × 10^6/kg (max 2 x 10^8)	0.6 to 6.0 x 10^8	DL1: 0.5 x 10^7 DL2: 1.0 x 10^8 DL3: 1.5 x 10^8
Bridging therapy	None allowed in pivotal trial but often used in standard practice	93%	72%
Lymphodepletion	Flu/Cy 500/30 x 3d	Flu/Cy 250/25 x 3d, or Benda 90 x 2d	Flu/Cy 300/30 x 3d
Approval status	FDA/EMA approved for DLBCL, high grade B-cell lymphoma, transformed FL, PMBCL	FDA/EMA approved for pediatric B-ALL, DLBCL, high grade B-cell lymphoma, transformed FL	Not yet FDA/EMA approved

Courtesy of Jeremy S. Abramson, MD, MMSC

ZUMA-1: PFS and OS of patients with R/R DLBCL receiving axicabtagene ciloleucel

Characteristics	Phase 1 and 2 (N = 108)
Median age (range), years	58 (23–76)
Age ≥ 65 years, n (%)	27 (25)
Disease stage III/IV, n (%)	90 (83)
IPI risk score 3 or 4, n (%)	48 (44)
≥ 3 prior therapies, n (%)	76 (70)
Refractory to 2nd- or later-line therapy, n (%)	80 (74)
Best response as PD to last prior therapy, n (%)	70 (65)
Relapse post ASCT, n (%)	25 (23)

ORR: (n=101): **83%** [74% by IRC]
CR: **58%** [54% by IRC]



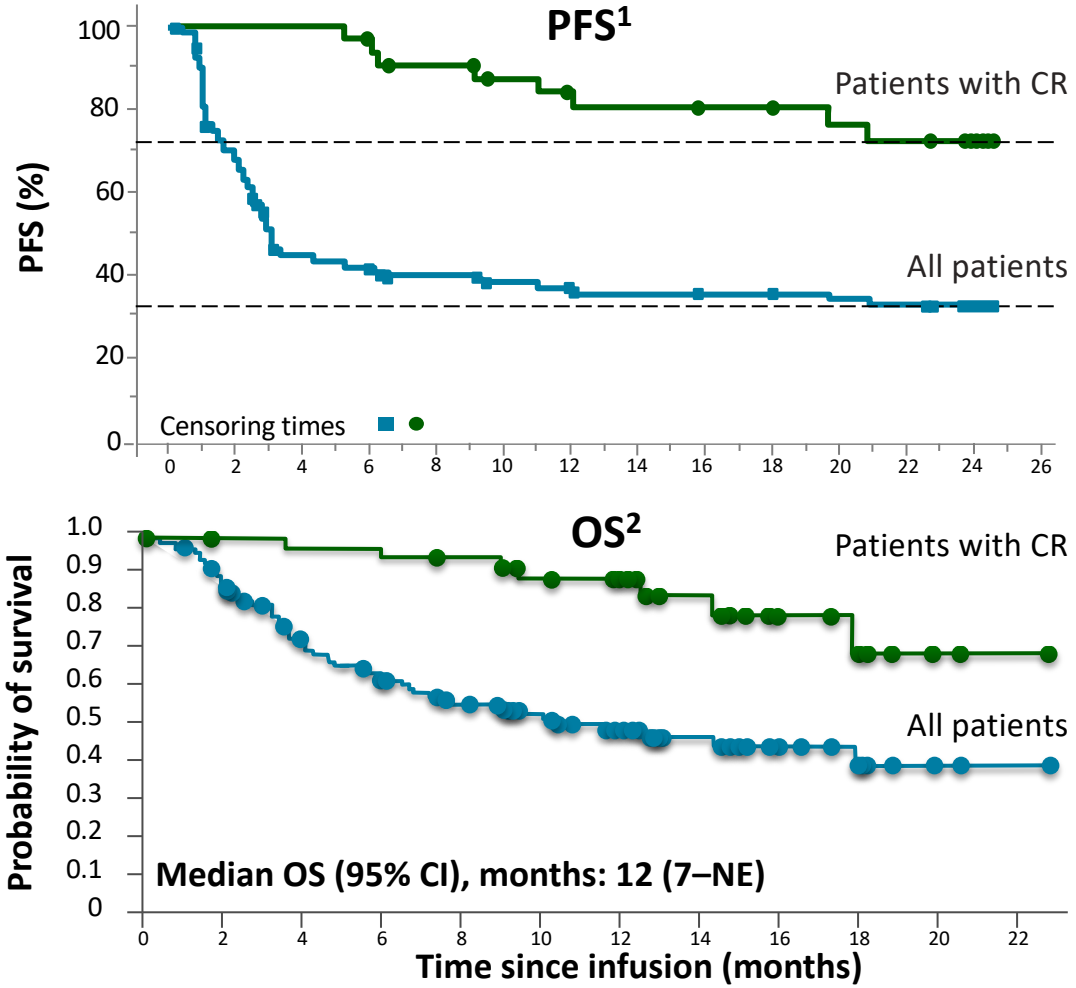
Locke FL, et al. Lancet Oncol. 2019;20:31-42.

Courtesy of Jeremy S. Abramson, MD, MMSC

JULIET: PFS and OS of patients with R/R DLBCL receiving tisagenlecleucel

Characteristics	Patients (N = 111)
Median age (range), years	56 (22–76)
Double-/triple-hit lymphoma, %	27
Number of prior lines of therapy, %	
2	44
3	31
4–6	21
Refractory to last therapy, %	55
Prior ASCT, %	49

ORR: 52%
CRR: 40%



MASSACHUSETTS GENERAL HOSPITAL
CANCER CENTER

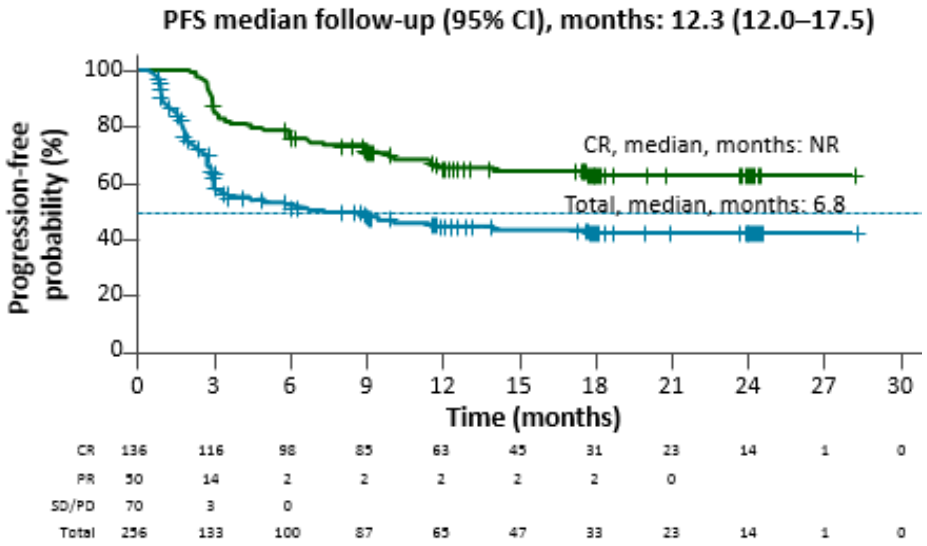
Schuster SJ, et al. N Engl J Med. 2019;380:45-56.

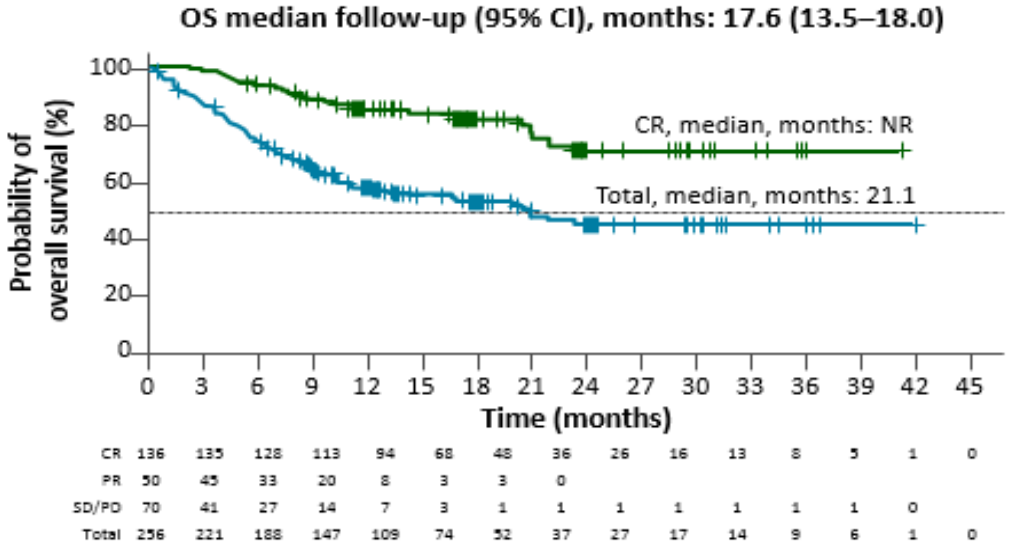
Courtesy of Jeremy S. Abramson, MD, MMSC

TRANSCEND-NHL-001 trial: liso-cel in multiply R/R aggressive B-NHL

Characteristic	Patients (N = 269)
Age, median (range), years	63 (18–86)
Double- / triple-hit lymphoma, n (%)	36 (13)
CNS involvement, n (%)	7 (3)
Median prior lines, n (range)	3 (1–8)
Chemo-refractory, n (range)	181 (67)
Prior HSCT, n (%)	94 (35)

Best response	Patients (N = 256)
Best ORR, %	73
Best CR, %	53
12-month duration of response, %	55





Abramson JS, et al. Presented at ASH 2019; abstract 241.

Courtesy of Jeremy S. Abramson, MD, MMSC

Toxicity of 3 Major CAR T-cell Products for relapsed/refractory DLBCL

	Axicabtagene Ciloleucel	Tisagenlecleucel	Lisocabtagene Maraleucel
Construct	antiCD19-**CD28**-CD3z	antiCD19-**41BB**-CD3z	antiCD19-**41BB**-CD3z
n	101	111	269
Any CRS Median time to onset	93% 2 days	58% 3 days	42% 5 days
≥ Gr 3 CRS†	11%	23%	2%
Any neurotoxicity	64%	21%	30%
≥ Gr 3 neurotoxicity	32%	12%	10%
Tocilizumab	43%	15%	20%
Steroid use	27%	11%	21%
	Locke, et al. Lancet Onc 2018	Schuster, et al. NEJM 2018	Abramson, et al. Proc ASH 2019

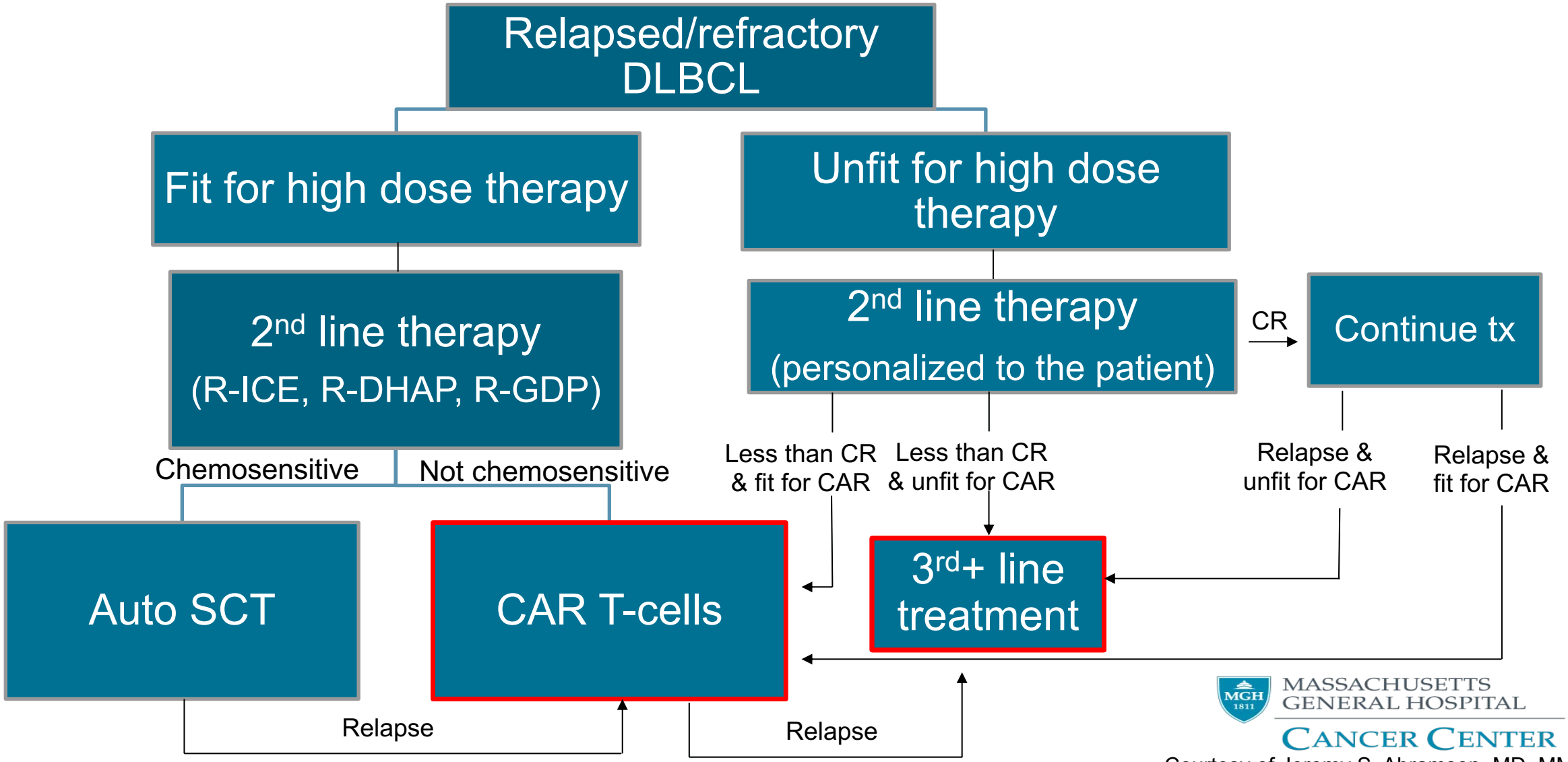
* Caveats in cross trial comparisons: Different eligibility criteria, phase of study, dose levels

†CRS toxicity grading scales differ across studies. Axi-Cel and Liso-cel used Lee criteria. Tisa-cel used Penn criteria

MASSACHUSETTS GENERAL HOSPITAL CANCER CENTER

Courtesy of Jeremy S. Abramson, MD, MMSC

My new paradigm to approaching relapsed DLBCL

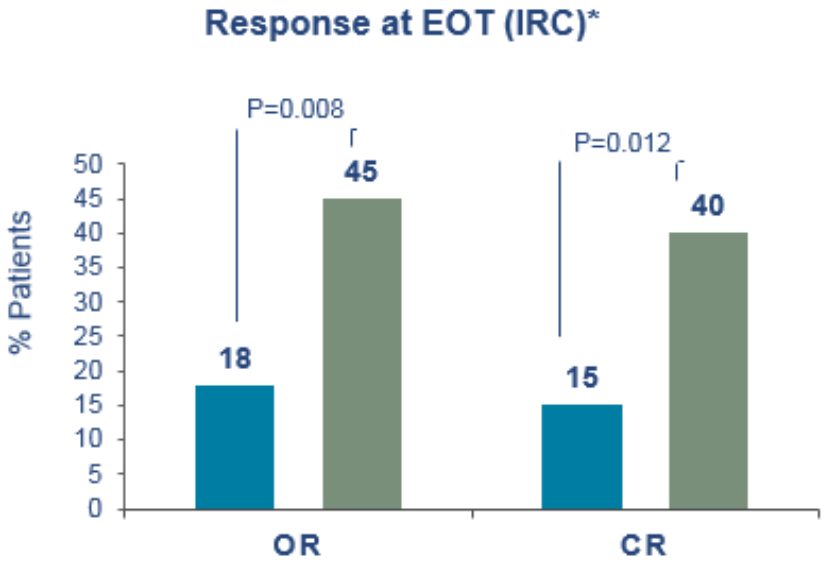


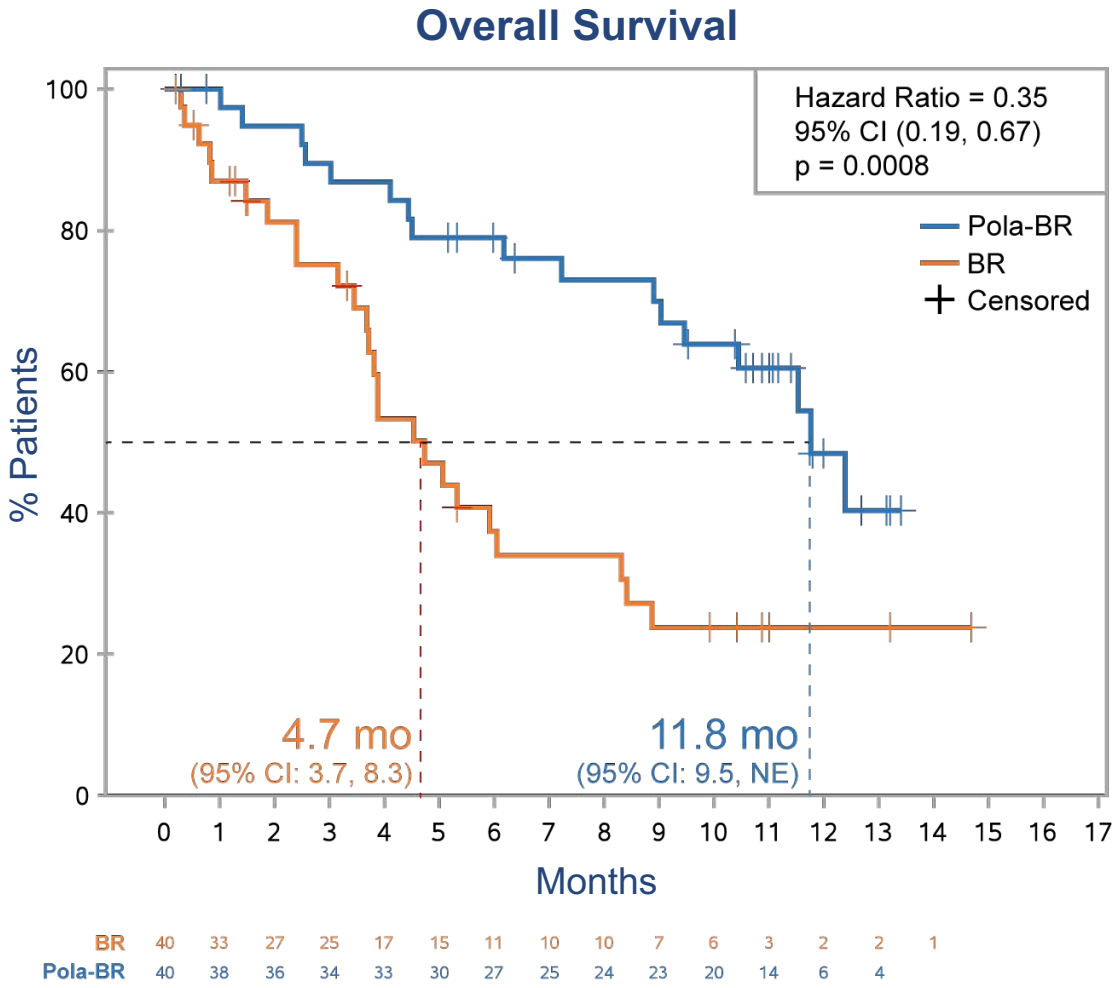
MASSACHUSETTS GENERAL HOSPITAL
CANCER CENTER

Courtesy of Jeremy S. Abramson, MD, MMSC

Polatuzumab Vedotin plus BR for Relapsed/Refractory DLBCL

	BR (N=40)	Pola-BR (N=40)
Median age	71 (30-84)	67 (33-86)
IPI ≥3	29 (73%)	22 (55%)
Median lines of prior tx	2 (1-5)	2 (1-7)
Prior BMT	6 (15%)	9 (23%)



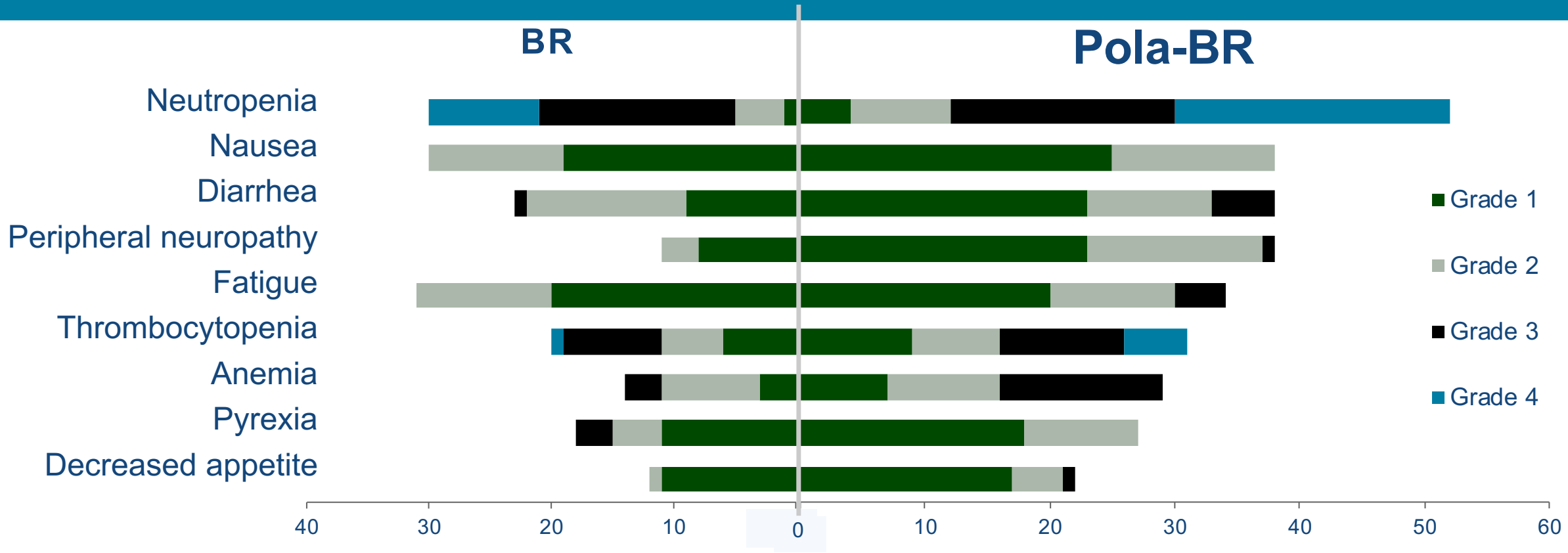


Sehn, et al. Proc ASCO 2018

Courtesy of Jeremy S. Abramson, MD, MMSC

MGH 1811 GENERAL HOSPITAL CANCER CENTER

Pola-BR: Adverse Events



SAEs occurred more frequently in pola-BR (33% BR vs 55% pola-BR)

Sehn, et al. Proc ASCO 2018

Courtesy of Jeremy S. Abramson, MD, MMSC

MASSACHUSETTS GENERAL HOSPITAL CANCER CENTER

Where does Polatuzumab-BR fit in?

- 3rd line or subsequent relapse of DLBCL
- Post-CAR T-cell failure or not eligible for CAR T-cells
- May be used as bridging therapy for CAR T-cells
- Caution with bendamustine in heavily pre-treated patients or patients considered candidates for future CAR T-cell treatment

- Await data from the Phase III POLARIX randomized double blind placebo controlled trial in the upfront setting:
  - R-CHOP versus Polatuzumab-CHP in previously untreated DLBCL

Courtesy of Jeremy S. Abramson, MD, MMSC

L-MIND:Tafasitamab (MOR208) + Len in R/R DLBCL

Study Design

Phase II Study
R/R DLBCL
N = 81

Len 25 mg/d PO, d1-21 for ≤12 28-day cycles
Taf 12 mg/kg/wk IV C1-3 (q4w; d1,8,15,22)
(+ loading dose C1D4) and C4-12 (q4w; d1,15)

Taf 12 mg/kg (d1,15) until PD

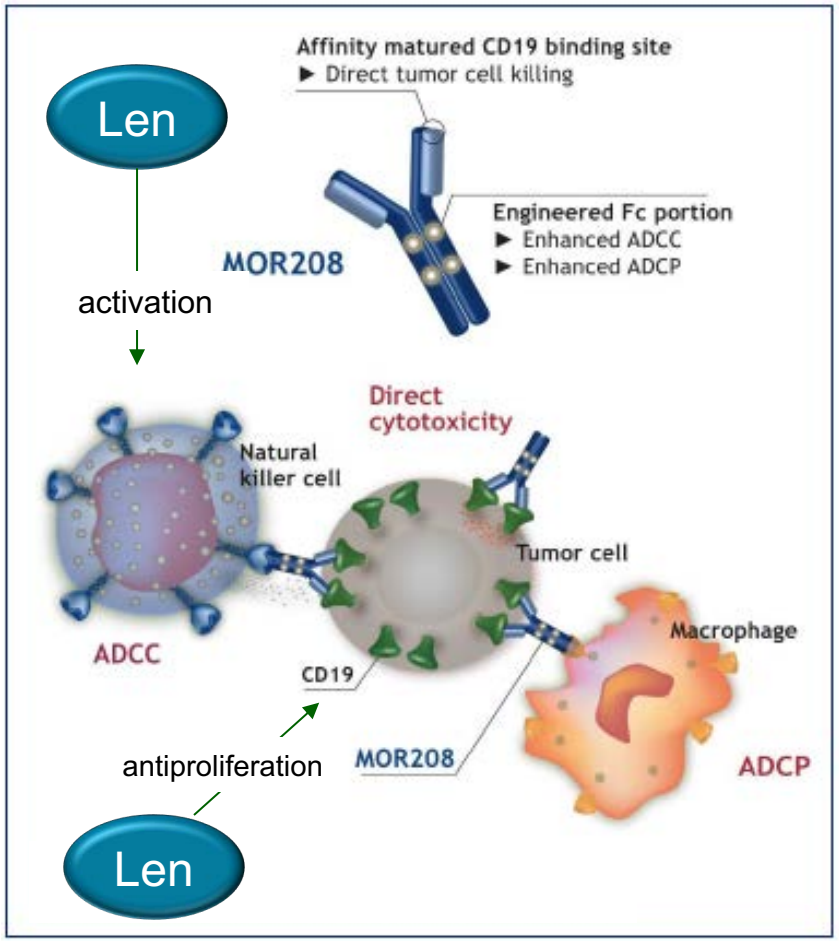
If progression-free after 12 cycles

Eligibility Criteria

- ECOG PS 0-2
- 1-3 prior regimens (including at least 1 anti-CD20)
- Ineligible for HDCT and ASCT
- **Excludes primary refractory disease**

Primary endpoint: ORR (per 2007 IWG with PET)

Secondary endpoints: DOR, PFS, OS, safety, COO, and biomarkers



Modified from MorphoSys AG, Company Update, Aug 2017

MASSACHUSETTS GENERAL HOSPITAL CANCER CENTER

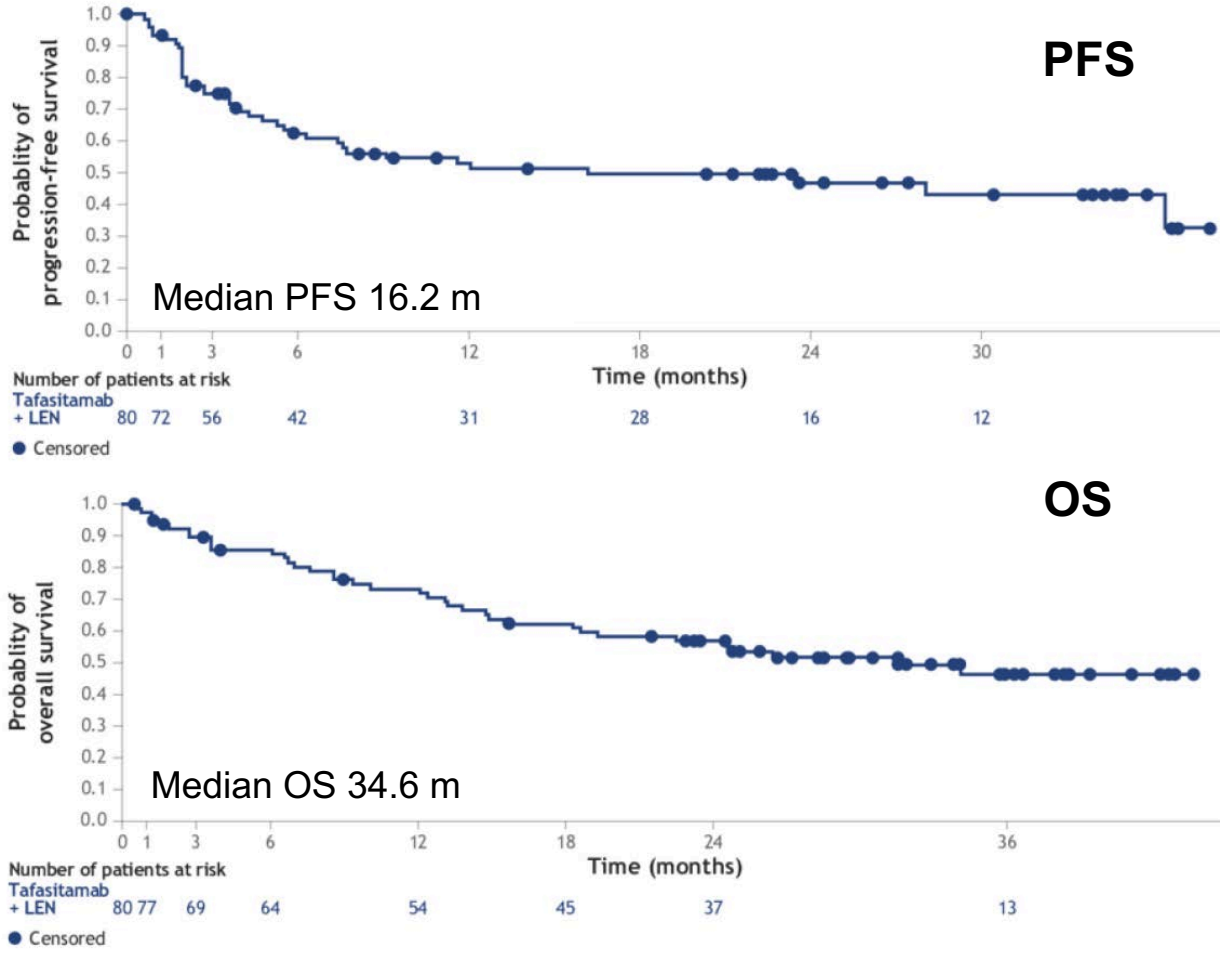
Salles et al. *ASH.* 2018:Abstract 227.

Courtesy of Jeremy S. Abramson, MD, MMSC

L-MIND: Tafasitamab (MOR208) – Lenalidomide in Relapsed/ Refractory DLBCL

	Patients (N=81)
Median (range) age, y	72 (41-87)
IPI 3-5, n (%)	42 (52)
Median (range) no. prior therapies	2 (1-4)
Refractory to previous line, n (%)	34 (42)
Prior SCT, n (%)	8 (10)
COO GCB (by IHC), n (%)	40 (49)

N=80
ORR 58.8%
CRR 41.3%
Median DOR 34.6m



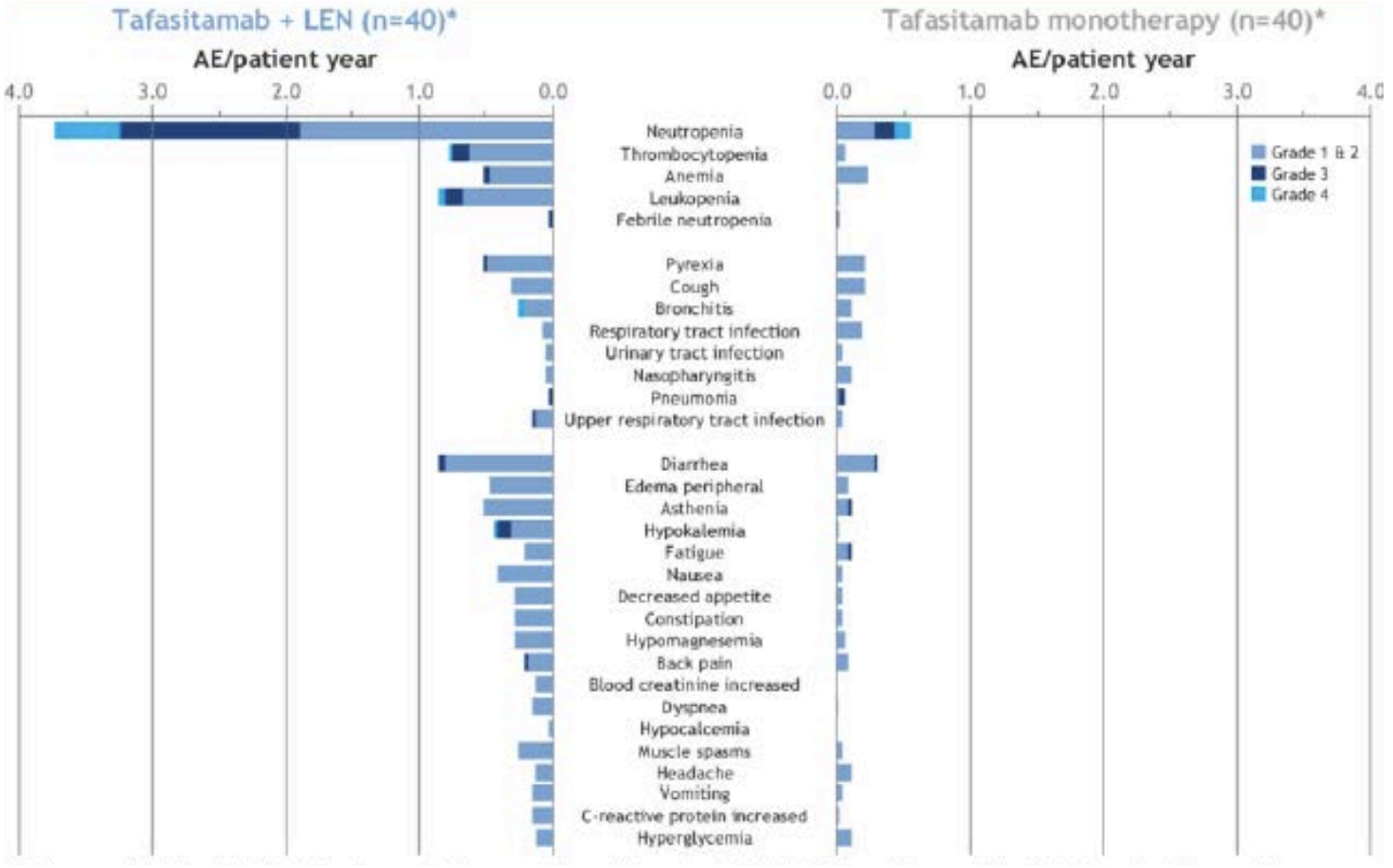
Salles, et al. Proc ASH 2017, Proc EHA 2020

Courtesy of Jeremy S. Abramson, MD, MMSC

MASSACHUSETTS GENERAL HOSPITAL CANCER CENTER

L-MIND: Toxicity

AEs, %	Any Grade	Grade 3/4
Neutropenia	48	43
Thrombocytopenia	32	17
Anemia	30	9
Diarrhea	29	1
Pyrexia	22	1
Asthenia	19	2



Safety (ASH 2018)

- 51% of patients required Len dose reduction
- 72% stayed on Len ≥20 mg
- 3 deaths (all unrelated): sudden death, respiratory failure, cerebrovascular accident

Salles, et al. Proc ASH 2018, EHA 2020

Courtesy of Jeremy S. Abramson, MD, MMSC

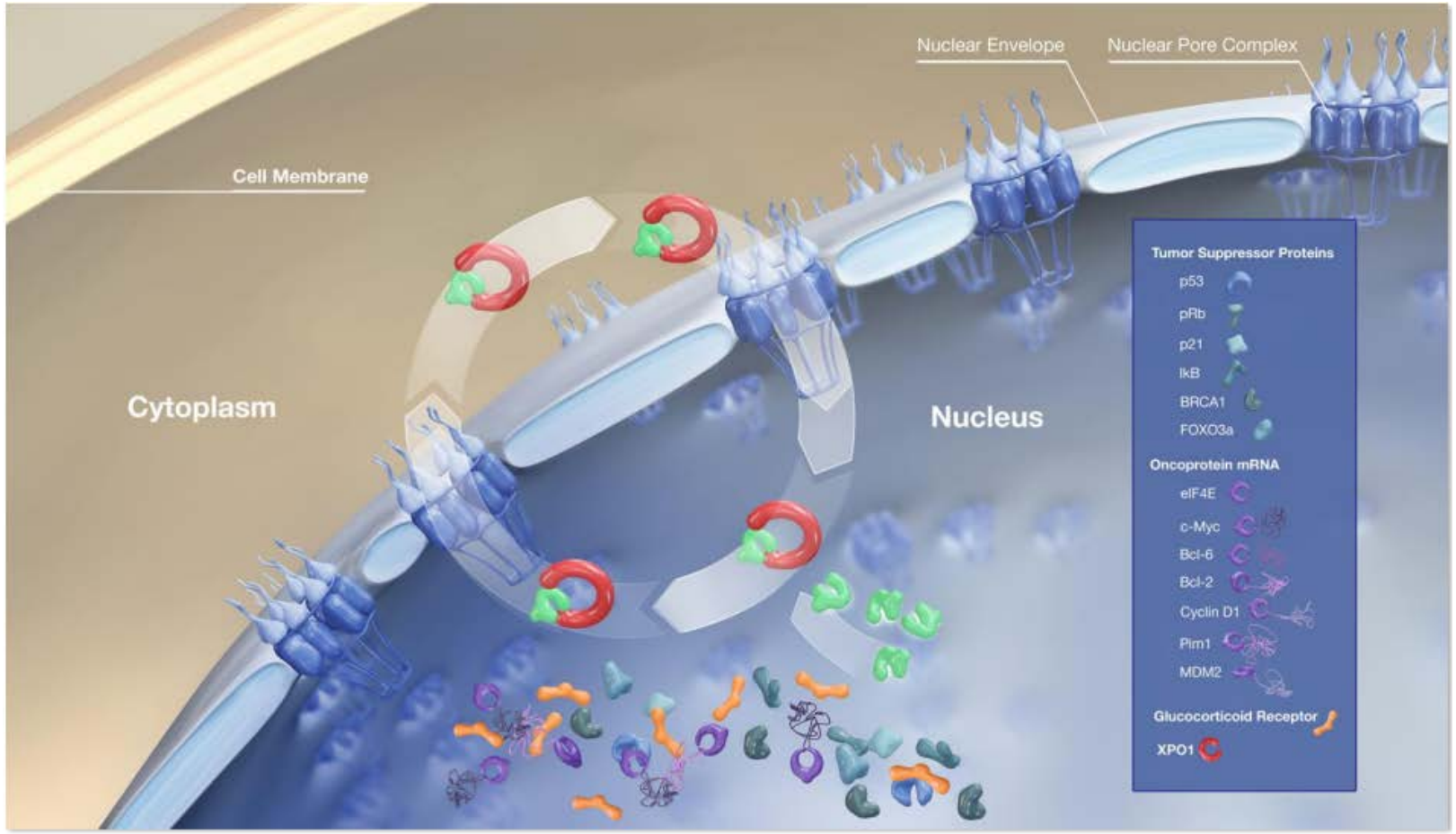
MASSACHUSETTS GENERAL HOSPITAL CANCER CENTER

Where will tafasitamab-lenalidomide fit in?

- Somewhat dependent on FDA label
- Likely 3rd line or subsequent relapse of DLBCL, but also appealing 2nd line therapy in non-transplant, non-CAR patients
- Need data as salvage therapy post anti-CD19 CAR T-cell failure
- At present, would avoid in patients who may be eligible for CAR T-cell therapy in the future or as bridging therapy (CD19 target)
- Ongoing follow up needed to assess whether this may be considered curative intent therapy

Courtesy of Jeremy S. Abramson, MD, MMSC

Selinexor: An XPO1 inhibitor



- SADAL study in DLBCL
  - Open label phase 2
  - 2-5 prior lines of tx
  - Ineligible for SCT
  - ≥60 days from last tx if PR or CR, otherwise ≥98 days (!)
  - 60 mg po twice weekly

Nalakonda, et al. Proc ICML 2019

Courtesy of Jeremy S. Abramson, MD, MMSC

MASSACHUSETTS GENERAL HOSPITAL CANCER CENTER

SADAL trial: Baseline Characteristics

Characteristic	N
Enrolled* as of April 3, 2019	**127**
Median Age, Years (Range)	**67** (35–87)
Males (%) : Females (%)	**75** (59%) : **52** (41%)
Median Years from DLBCL Diagnosis (Range)	**2.6 yrs** (<1–26.2)
De novo DLBCL : Transformed DLBCL : Unknown	**96** (76%) : **30** (24%) : **1** (<1%)
GCB Subtype : Non-GCB Subtype : Unclassified	**59** GCB : **63** Non-GCB : **5** Unclassified
Median Prior Treatment Regimens (Range)	**2 (1–6)**
Prior Transplantation	39 (31%)

Nalakonda, et al. Proc ICML 2019

Courtesy of Jeremy S. Abramson, MD, MMSC

MASSACHUSETTS GENERAL HOSPITAL CANCER CENTER

SADAL trial: Adverse events

AE Term	Selinexor 60 mg BIW mITT Population (N=127)				
Hematologic	**Grade 1 (%)**	**Grade 2 (%)**	**Grade 3 (%)**	**Grade 4 (%)**	**Total (N=127)**
Thrombocytopenia	6 (4.7)	10 (7.9)	35 (27.6)	15 (11.8)	**66 (52.0)**
Anemia	3 (2.4)	18 (14.2)	16 (12.6)	1 (0.8)	**38 (29.9)**
Neutropenia	1 (0.8)	6 (4.7)	17 (13.4)	9 (7.1)	**33 (26.0)**
Gastrointestinal					
Nausea	31 (24.4)	28 (22.0)	8 (6.3)	--	**67 (52.8)**
Anorexia	20 (15.7)	19 (15.0)	5 (3.9)	--	**44 (34.6)**
Vomiting	25 (19.7)	6 (4.7)	2 (1.6)	--	**33 (26.0)**
Diarrhea	14 (11.0)	8 (6.3)	4 (3.1)	--	**26 (20.5)**
Dysgeusia	12 (9.4)	3 (2.4)	--	--	**15 (11.8)**
Constipation	10 (7.9)	4 (3.1)	--	--	**14 (11.0)**
Constitutional					
Fatigue	19 (15.0)	17 (13.4)	12 (9.4)	--	**48 (37.8)**
Asthenia	5 (3.9)	11 (8.7)	3 (2.4)	--	**19 (15.0)**
Weight Loss	10 (7.9)	17 (13.4)	--	--	**27 (21.3)**

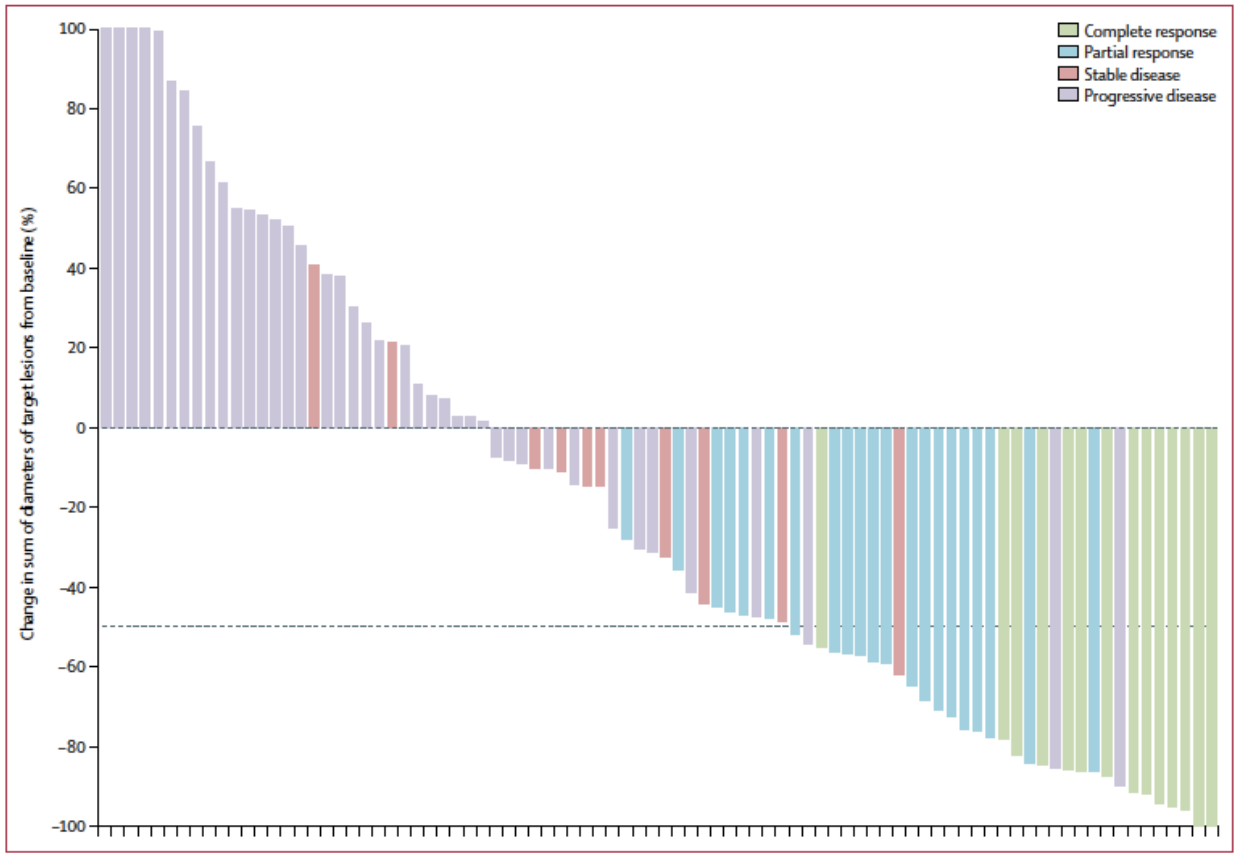
Nalakonda, et al. Proc ICML 2019

Courtesy of Jeremy S. Abramson, MD, MMSC

MASSACHUSETTS GENERAL HOSPITAL CANCER CENTER

SADAL trial: Response

Overall response	Complete response	Partial response	Stable disease	Progressive disease/ no response
28%	12%	17%	9%	63%



Median PFS: 2.6 months

Median DOR: 9.3 months

MASSACHUSETTS GENERAL HOSPITAL CANCER CENTER

Nalakonda, et al. Lancet Haem 2020.

Courtesy of Jeremy S. Abramson, MD, MMSC

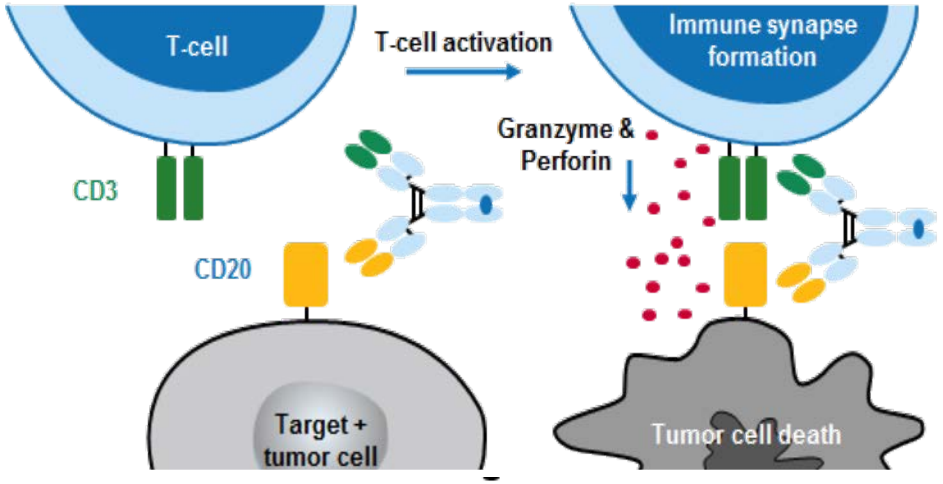
Where does selinexor fit in?

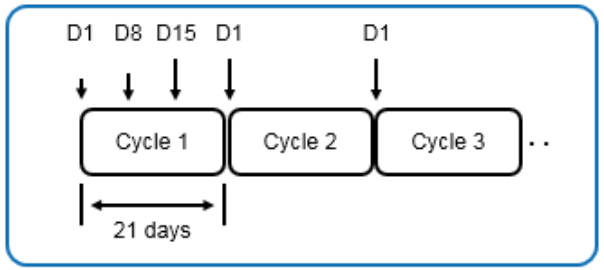
- Approved for 3rd line or subsequent relapse of DLBCL
- But, population was cherry-picked, activity is modest, and toxicity is significant
- I would consider in a patient when I have no other standard option or clinical trial available

Courtesy of Jeremy S. Abramson, MD, MMSC

A promising future option: Bispecific mAbs

Mosunetuzumab (RG7828; BTCT4465A)

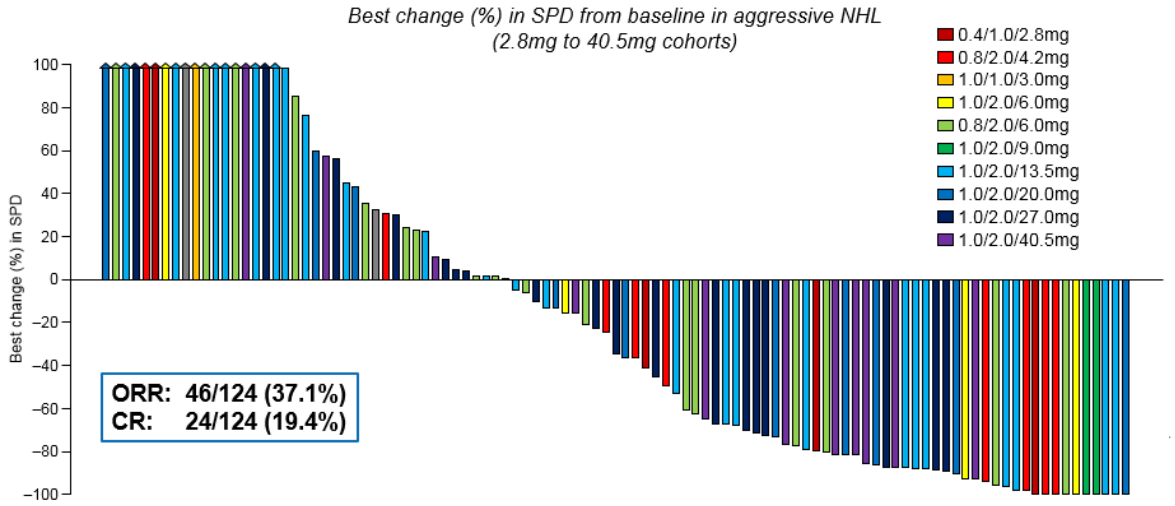




- IV administration in outpatient setting*
- Cycle 1 step-up dosing then fixed dosing in subsequent cycles
- Initial treatment = 8 cycles; if CR achieved, treatment discontinued; if PR or SD, treatment continued for up to 17 cycles

n (%)	N=270
Median age, years (range)	62 (19–96)
Aggressive NHL	180 (66.7%)
Indolent NHL	85 (31.5%)
Median prior tx	3 (1–14)†
Prior CAR-T therapy	30 (11.1%)
Prior autologous SCT	77 (28.5%)
Refractory to last prior tx	194 (71.9%)
Refractory to prior anti-CD20	233 (86.3%)

Objective response rate in aggressive NHL



Schuster, et al. Proc ASH 2019

Courtesy of Jeremy S. Abramson, MD, MMSC

A Teaching Affiliate of Harvard Medical School

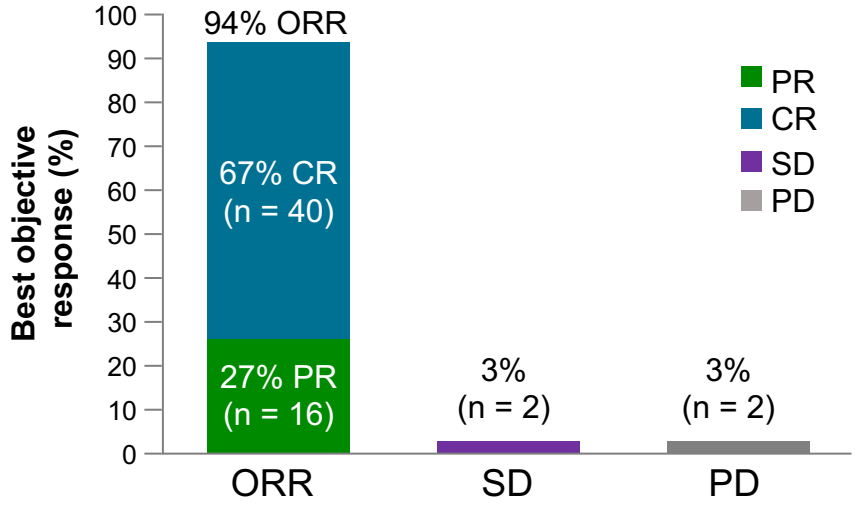
Emerging data for anti-CD19 CAR T-cells in diseases other than DLBCL

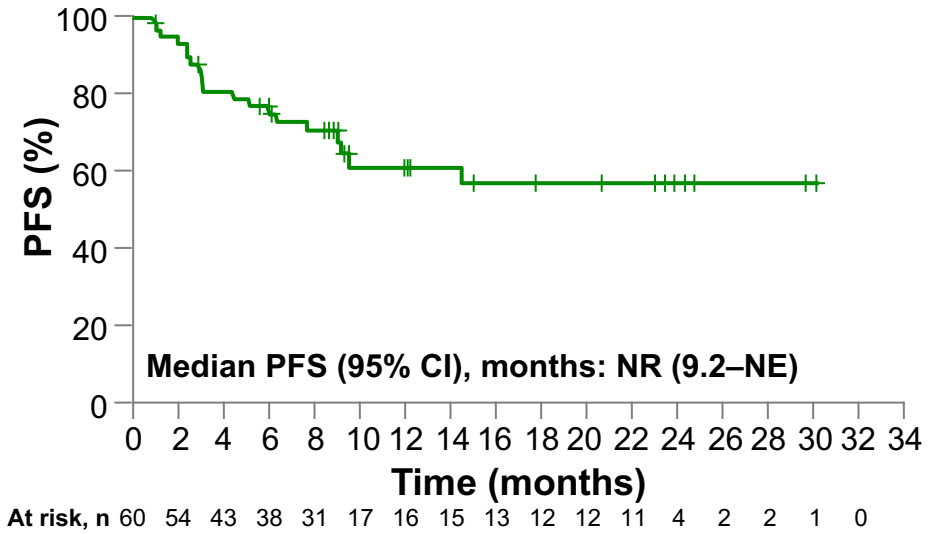
MASSACHUSETTS GENERAL HOSPITAL
CANCER CENTER

Courtesy of Jeremy S. Abramson, MD, MMSC

ZUMA-2: Brexucabtagene autoleucel (KTE-X19) in relapsed/refractory mantle cell lymphoma (FDA approved)

Characteristics	n = 68
Age, median (range), years	65 (38-79)
Median no. of prior treatments (range)	3 (1–5)
Prior BTKi, n (%)	68 (100)
BTKi refractory, n (%)	42 (62)
Prior ASCT, n (%)	29 (43)
Ki67 ≥ 30%, n/N (%)	40/49 (82)
Blastoid variant, n (%)	21 (31)





Toxicity	n = 68
Any-grade CRS, n (%)	62 (91)
Grade 3 or 4 CRS, n (%)	10 (15)
Time to onset, median, days (range)	2 (1–13)
Any-grade neurological toxicity, n (%)	43 (63)
Grade 3 or 4 neurological toxicity, n (%)	21 (31)
Time to onset, median, days (range)	7 (1–32)

ASCT, autologous stem cell transplant; BTKi, Bruton tyrosine kinase inhibitor; CI, confidence interval; CR, complete remission; CRS, cytokine release syndrome; NE, not estimatable; NR, not reached; NT, neurological toxicity; mORR, overall response rate; PD, progressive disease; PR, partial response; PFS, progression-free survival; SD, stable disease.

Wang M, et al. N Engl J Med. 2020;382:1331-42.

Courtesy of Jeremy S. Abramson, MD, MMSC

MASSACHUSETTS GENERAL HOSPITAL CANCER CENTER

TRANSCEND-CLL-004: lisocabtagene maraleucel in R/R CLL

Characteristic	All patients (N = 23)
Median age (range), years	66 (49–79)
High-risk cytogenetics (any), n (%)	19 (83)
del(17p)	8 (35)
p53 mutation	14 (61)
Complex karyotype	11 (48)
Median no. of prior lines of therapy (range)	5 (2–11)
Prior ibrutinib, n (%)	23 (100)
Ibrutinib relapsed/refractory, n (%)	21 (91)
BTKi progression and failed venetoclax, n (%)	9 (39)

Outcome	
Best response, n (%)	**n = 22**
ORR	18 (82)
CR/CRi	10 (46)
Undetectable MRD, n (%)	**n = 20**
Blood (by flow cytometry)	15 (75)
Bone marrow (by NGS)	13 (65)

AEs	N = 23
Any-grade CRS, n (%)	17 (74)
Median time to onset, days (range)	4 (1–10)
Grade 3, n (%)	2 (9)
Any-grade neurological event, n (%)	9 (39)
Median time to onset, days (range)	4 (2–21)
Grade ≥ 3, n (%)	5 (22)
Tocilizumab and/or dexamethasone, n (%)	17 (74)

Lisocabtagene maraleucel is not approved by any regulatory agency. AE, adverse event; BM, bone marrow; BTKi, Bruton tyrosine kinase inhibitor; CR, complete remission; CRi, CR with incomplete blood count recovery; CRS, cytokine release syndrome; del, deletion; MRD, minimal residual disease; NE, neurological event; NGS, next-generation sequencing; ORR, overall response rate; R/R, relapsed/refractory.

Siddiqi T, et al. Presented at ASH 2019; abstract 503. NCT03331198. Available from: https://clinicaltrials.gov/ct2/show/NCT03331198. Accessed May 2020.

Courtesy of Jeremy S. Abramson, MD, MMSC

MASSACHUSETTS GENERAL HOSPITAL CANCER CENTER

ZUMA-5 Study of Axi-cel in relapsed/refractory FL and MZL

Characteristic	FL n = 80	MZL n = 16	All Patients N = 96
Median age (range), years	62 (34 – 79)	67 (52 – 77)	63 (34 – 79)
≥ 65 years, n (%)	29 (36)	11 (69)	40 (42)
Male, n (%)	43 (54)	4 (25)	47 (49)
ECOG PS 1, n (%)	33 (41)	6 (38)	39 (41)
Stage IV disease, n (%)	37 (46)	13 (81)	50 (52)
≥ 3 FLIPI, n (%)	38 (48)	11 (69)	49 (51)
High tumor bulk (GELF criteria), n (%)[a]	40 (50)	7 (44)	47 (49)
Median no. of prior therapies (range)	3 (2 – 9)	3 (2 – 8)	3 (2 – 9)
≥ 3, n (%)	56 (70)	11 (69)	67 (70)
Prior PI3Ki therapy, n (%)	26 (33)	6 (38)	32 (33)
Refractory disease, n (%)[b]	59 (74)	11 (69)	70 (73)
POD24 from first anti-CD20 mAb-containing therapy, n (%)[c]	45 (56)	7 (44)	52 (54)
Prior autologous SCT, n (%)	19 (24)	3 (19)	22 (23)

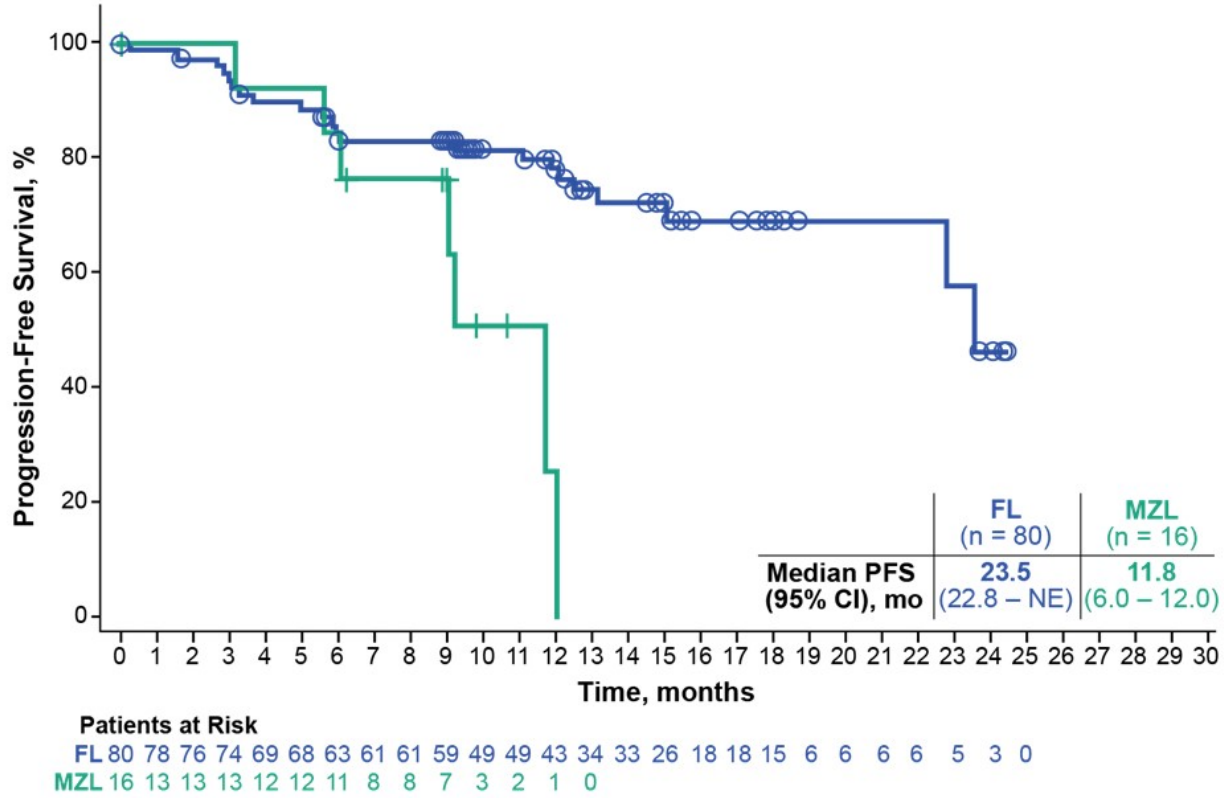
Jacobson, et al. Proc ASCO 2020

Courtesy of Jeremy S. Abramson, MD, MMSC

ZUMA-5 Efficacy

	All patients (n=96)	FL (n=80)	MZL (n=16)
ORR	93%	95%	81%
CRR	80%	81%	75%
PRR	13%	14%	6%

	FL (n = 80)	MZL (n = 16)
Median follow-up (range), mo	**16.0** (10.1 – 28.8)	**11.1** (1.9 – 23.9)
Median DOR (95% CI), mo	**20.8** (19.7 – NE)	**10.6** (4.6 – 11.1)



Jacobson, et al. Proc ASCO 2020

Courtesy of Jeremy S. Abramson, MD, MMSC

MASSACHUSETTS GENERAL HOSPITAL CANCER CENTER

ZUMA-5: Toxicity

Adverse Events of Special Interest (n=140)	
Cytokine Release Syndrome	
Any grade	111 (79%)
Grade ≧ 3	11 (8%)
Median time to onset	4 days (range 1-15)
Median duration	6 days (range 1-27)
Tocilizumab	66 (47%)
Steroids	24 (17%)
Neurologic Events	
Any grade	81 (58%)
Grade ≧ 3	24 (17%)
Median time to onset	7 days (range 1-177)
Median duration	14 days (range 1-452)
Tocilizumab	10 (7%)
Steroids	47 (34%)

Jacobson, et al. Proc ASCO 2020

Courtesy of Jeremy S. Abramson, MD, MMSC

MASSACHUSETTS GENERAL HOSPITAL CANCER CENTER

Impact of ZUMA-5

- Axi-cel shows high response rates with encouraging durability in heavily pre-treated follicular lymphoma
- Longer follow up is required to assess long term durability (i.e. cure)
- Toxicity with axi-cel is significant, so alternate CAR T-cell products may be preferred once data is available with tisa-cel and liso-cel
- Bispecific antibodies look appealing in early trials and may also be preferred as a less toxic off-the-shelf option, once available.

Courtesy of Jeremy S. Abramson, MD, MMSC

MODULE 2: Mantle Cell Lymphoma

- **Faculty Case – Dr Flowers**
  - A 63-Year-Old Man with R/R MCL Treated with Ibrutinib
  - **Key Relevant Data Sets**
    - Ibrutinib alone or in combination; ongoing Phase III trials
    - FDA approvals of acalabrutinib and zanubrutinib
    - Venetoclax for high-risk R/R disease

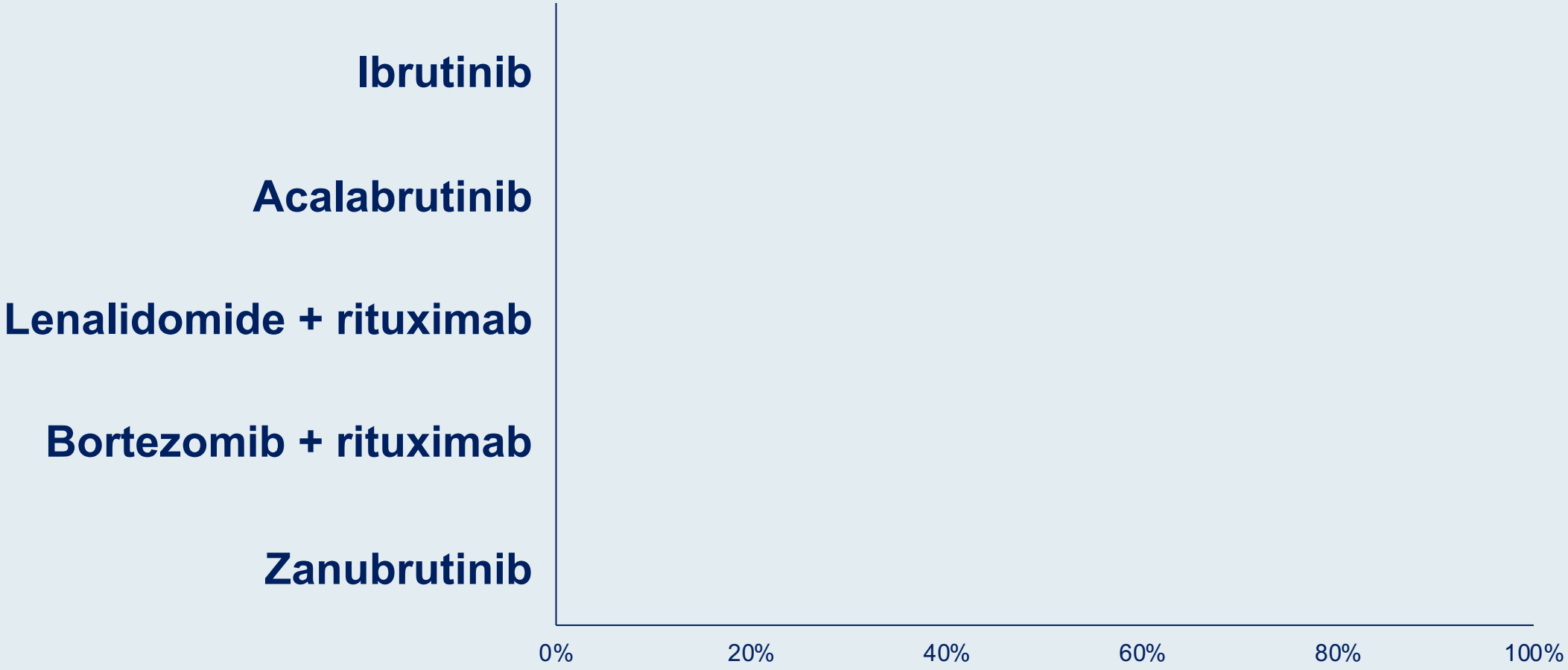
Case Presentation - Dr Flowers: A 63-Year-Old Man with R/R MCL Treated with Ibrutinib

- 63-yr-old gentleman who worked as a house painter presented with 3-mo history of bilateral neck LN swelling (ECOG PS 1)
- Exam: palpable bilateral neck, bilateral axillary and shotty bilateral inguinal nodes
- CT scan showed extensive adenopathy in those locations and mesentery (largest axillary node: 3.5 x 2.5 cm); nodes in cervical chain and infraclavicular; multiple abdominal LNs (largest: 4-cm retroperitoneal node)
- Biopsy of left axillary LN showed neoplastic lymphoid cells positive for CD5, CD20, and cyclin D1, CD10 negative; Ki67 30%; diagnosis: mantle cell lymphoma
- LDH 2X ULN; WBC 12k
- Treated initially with R-CHOP alternating with R-DHAP for 4 cycles followed by ASCT (no maintenance rituximab)
- 4 years later (currently 67 yrs), patient relapse with neck adenopathy; PET/CT shows abdominal lymphadenopathy (largest: 3-cm messenteric node)

Case Presentation - Dr Flowers: A 63-Year-Old Man with R/R MCL Treated with Ibrutinib (continued)

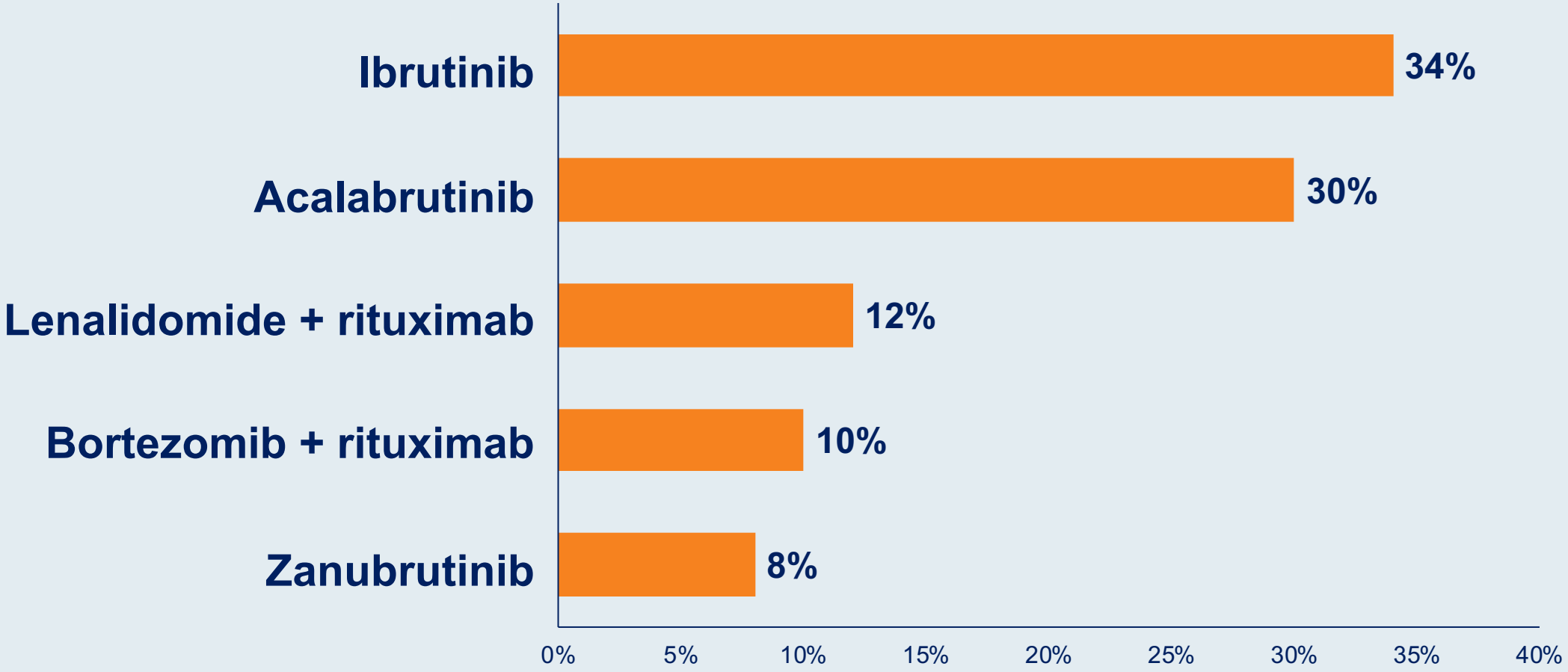
- Treated with ibrutinib 560 mg/day
- Achieved PR
  - Resolved symptoms and greatly improved palpable lymphadenopathy
- After 6 mos on ibrutinib, he experienced moderate but bearable fatigue
- Has continued for 2.5 years

A 78-year-old patient with mantle cell lymphoma (MCL) initially treated with BR followed by 2 years of maintenance rituximab experiences disease relapse 3 years later. What would you recommend?



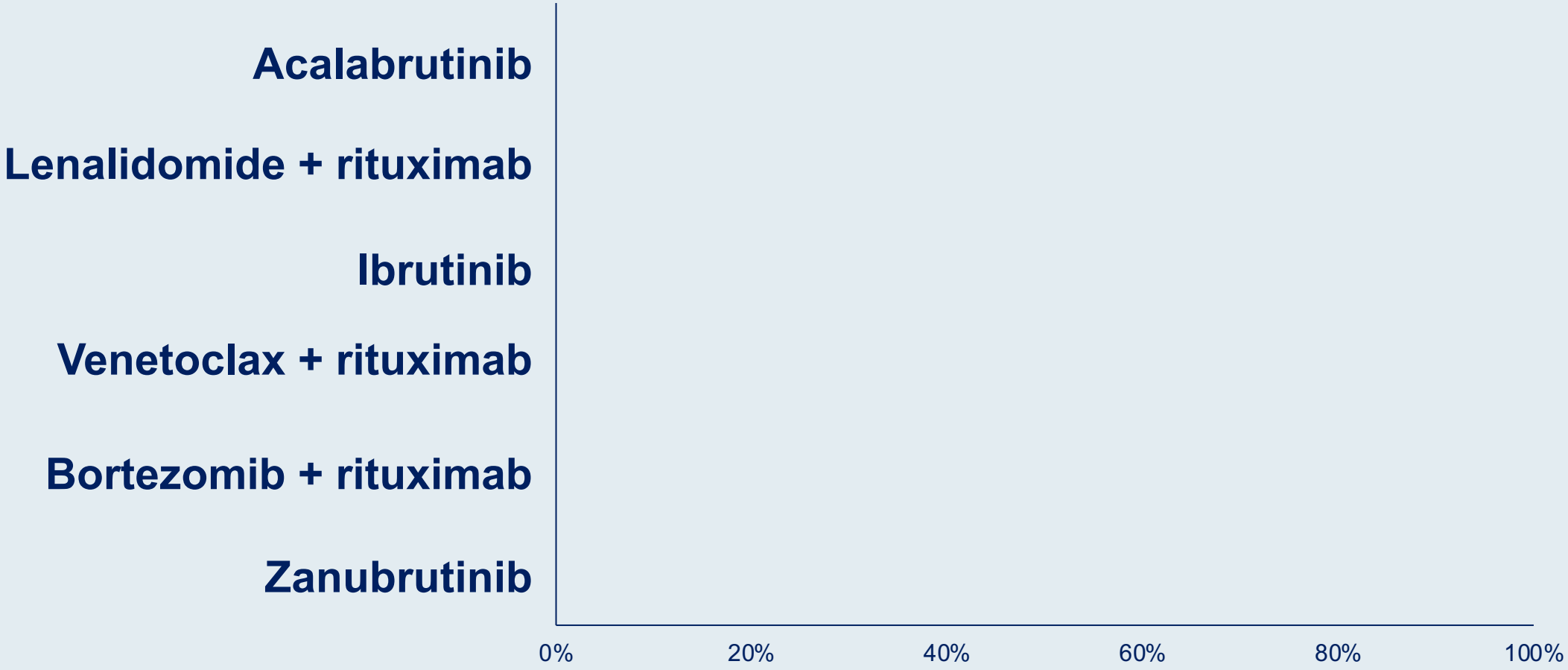
Survey of 50 US-based medical oncologists

A 78-year-old patient with mantle cell lymphoma (MCL) initially treated with BR followed by 2 years of maintenance rituximab experiences disease relapse 3 years later. What would you recommend?



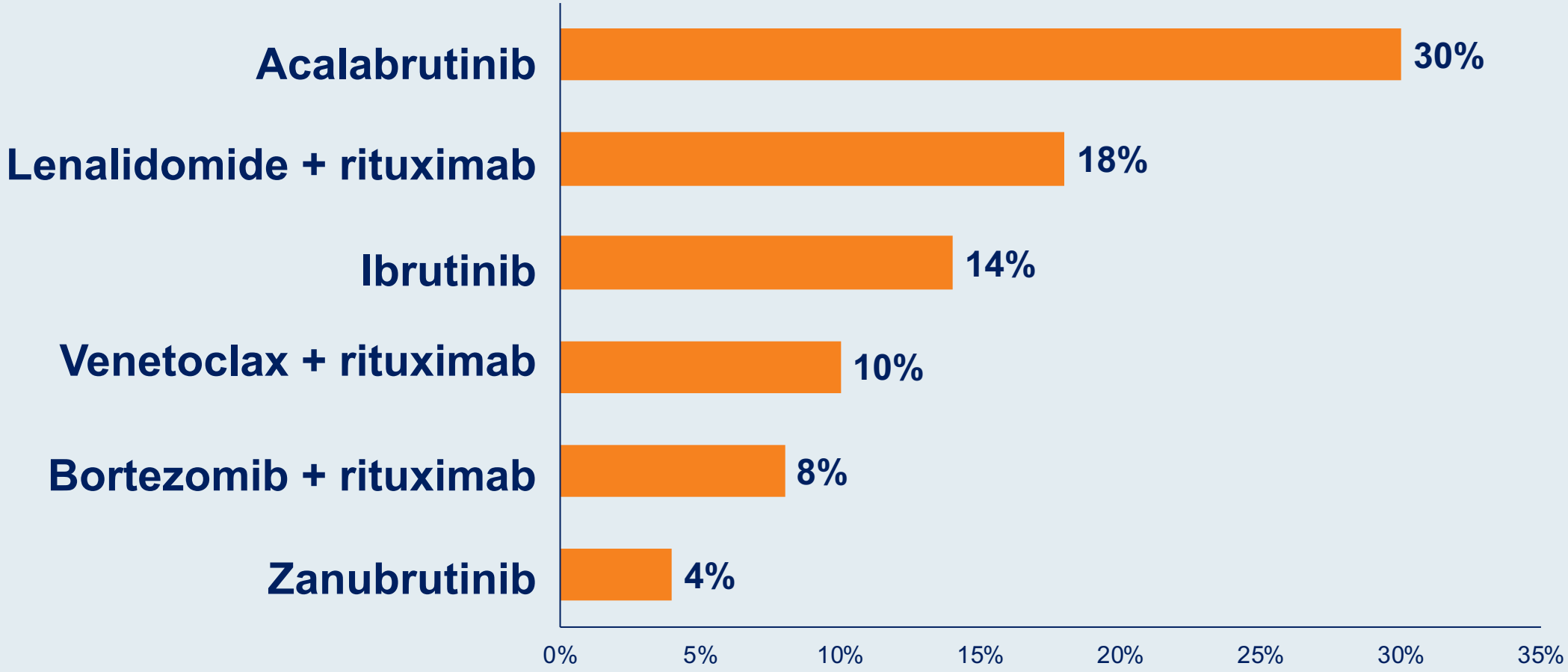
Survey of 50 US-based medical oncologists

A 65-year-old patient with MCL initially treated with BR followed by 2 years of maintenance rituximab experiences disease relapse 3 years later. The patient has a history of atrial fibrillation and is receiving anticoagulation therapy. What would you recommend?



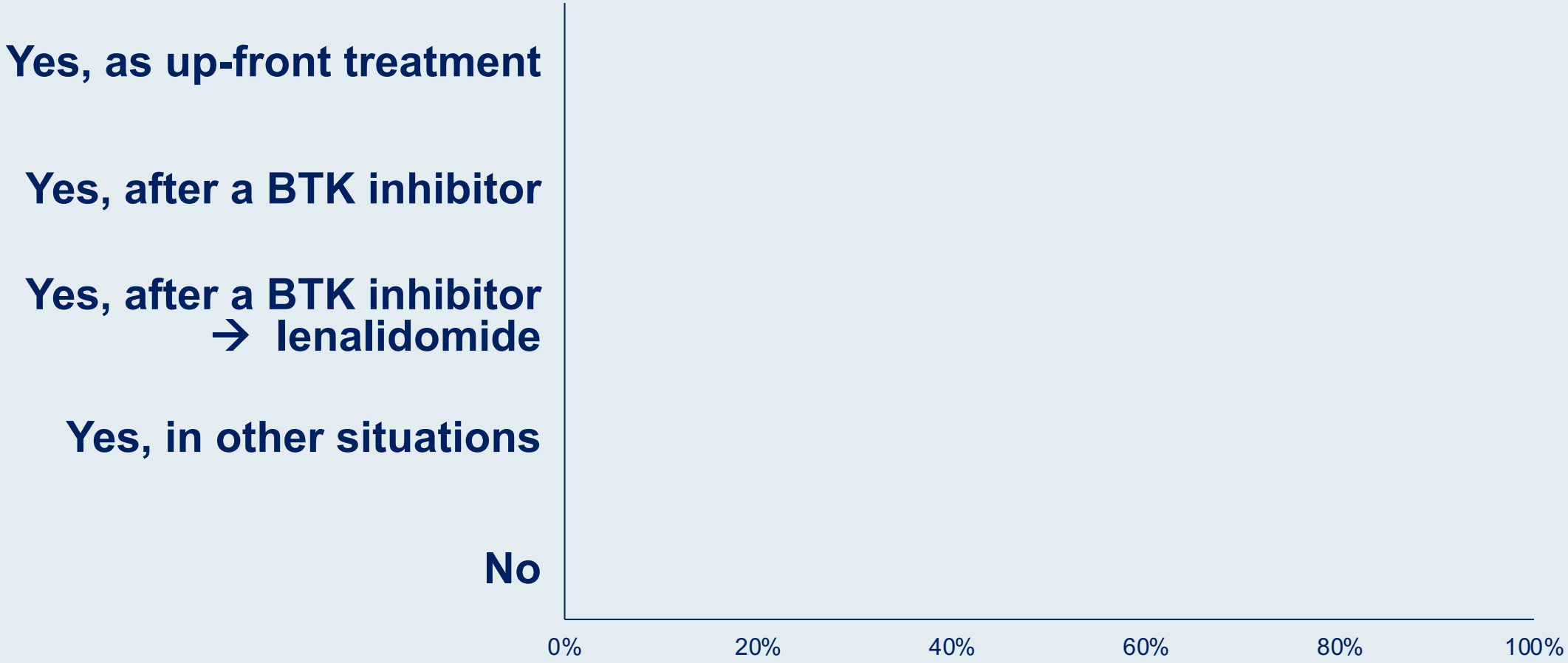
Survey of 50 US-based medical oncologists

A 65-year-old patient with MCL initially treated with BR followed by 2 years of maintenance rituximab experiences disease relapse 3 years later. The patient has a history of atrial fibrillation and is receiving anticoagulation therapy. What would you recommend?



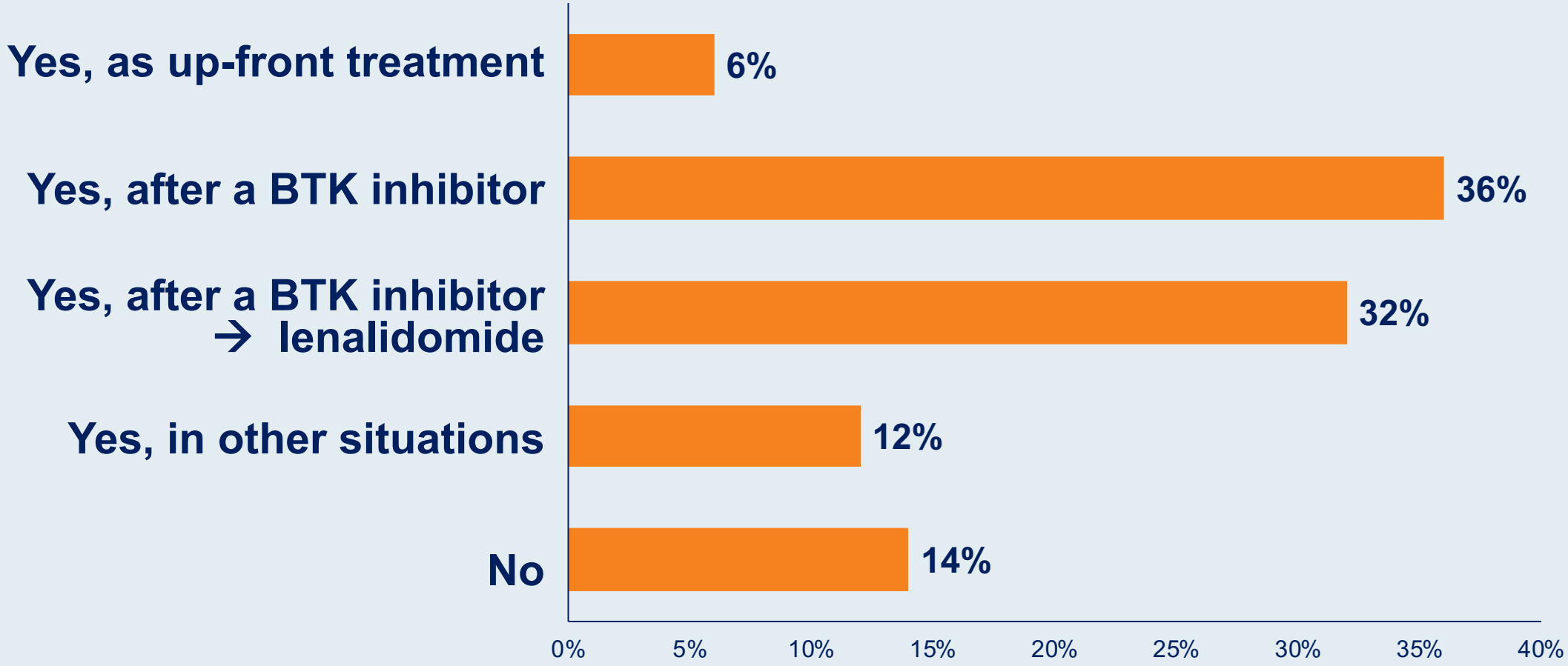
Survey of 50 US-based medical oncologists

Based on available data and regulatory and reimbursement issues aside, would you attempt to access venetoclax for select patients with relapsed/refractory MCL?



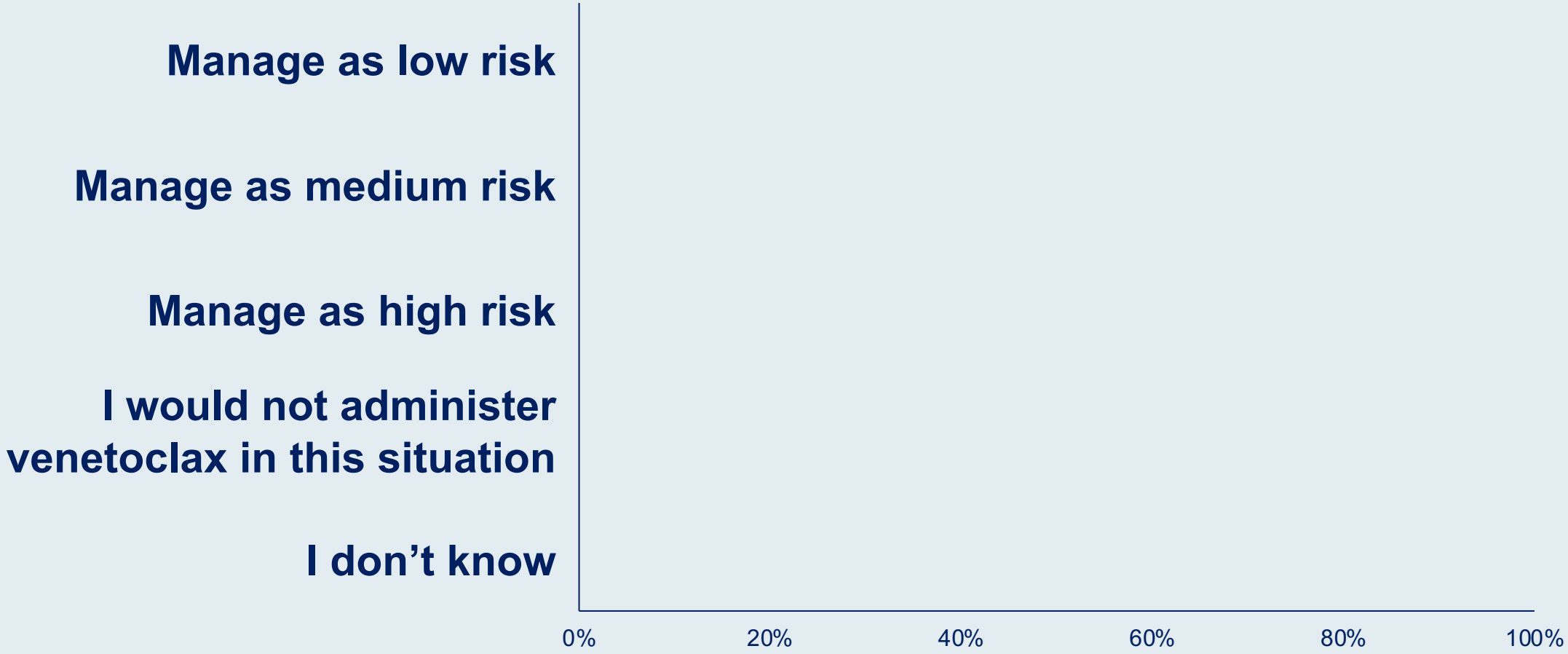
Survey of 50 US-based medical oncologists

Based on available data and regulatory and reimbursement issues aside, would you attempt to access venetoclax for select patients with relapsed/refractory MCL?



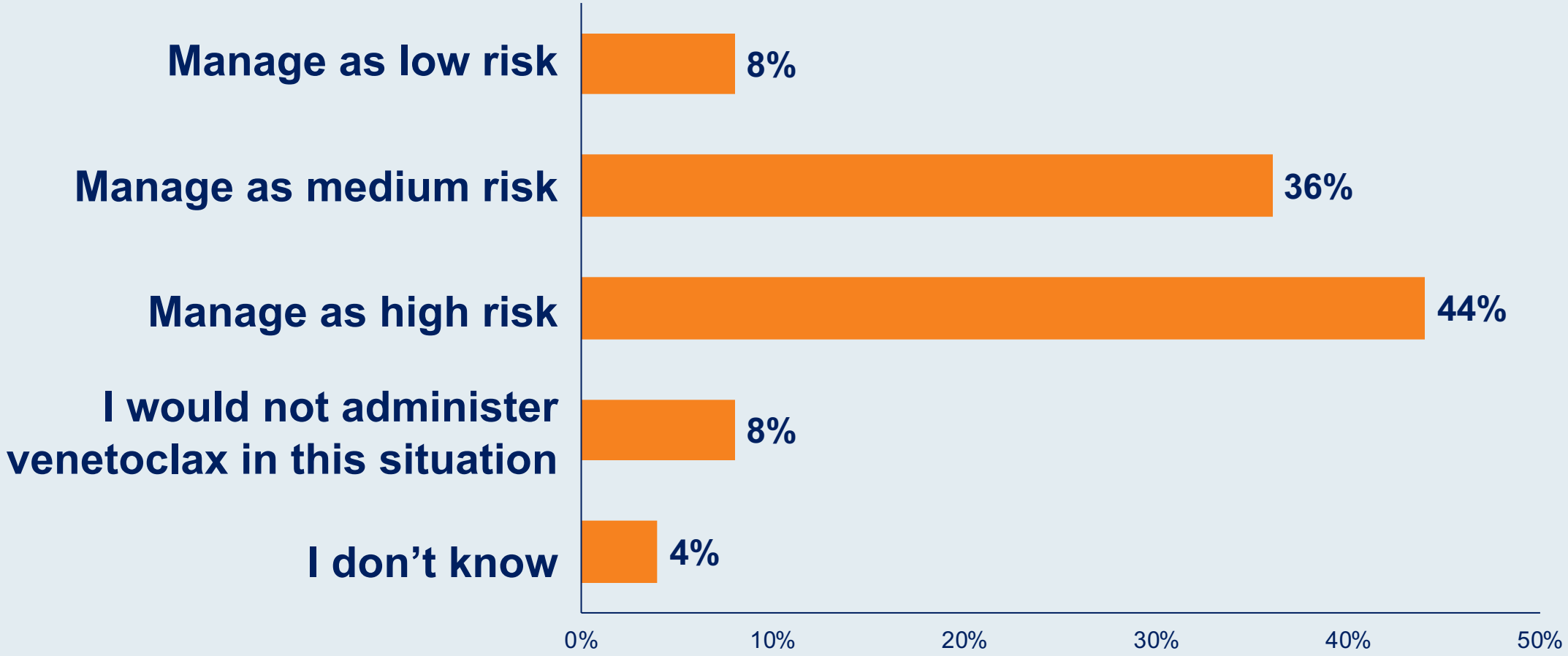
Survey of 50 US-based medical oncologists

How would you approach the prevention of tumor lysis syndrome (TLS) in a 78-year-old patient with relapsed MCL who is about to receive venetoclax and is at low risk for TLS based on absolute lymphocyte count and lymph node involvement but has a creatinine level of 2.4 mg/dL and a creatine clearance of 30 mL/min with normal uric acid?



Survey of 50 US-based medical oncologists

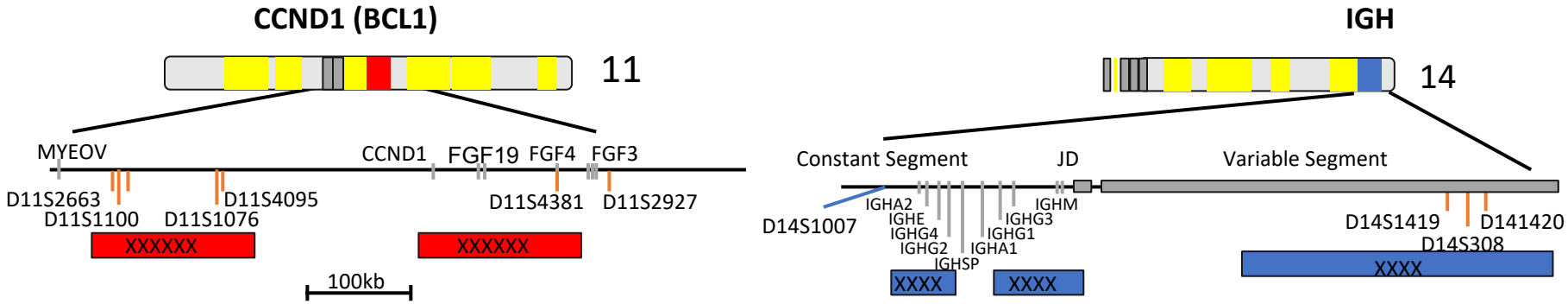
How would you approach the prevention of tumor lysis syndrome (TLS) in a 78-year-old patient with relapsed MCL who is about to receive venetoclax and is at low risk for TLS based on absolute lymphocyte count and lymph node involvement but has a creatinine level of 2.4 mg/dL and a creatine clearance of 30 mL/min with normal uric acid?



Survey of 50 US-based medical oncologists

Mantle Cell Lymphoma

- Genetic hallmark: t(11;14)



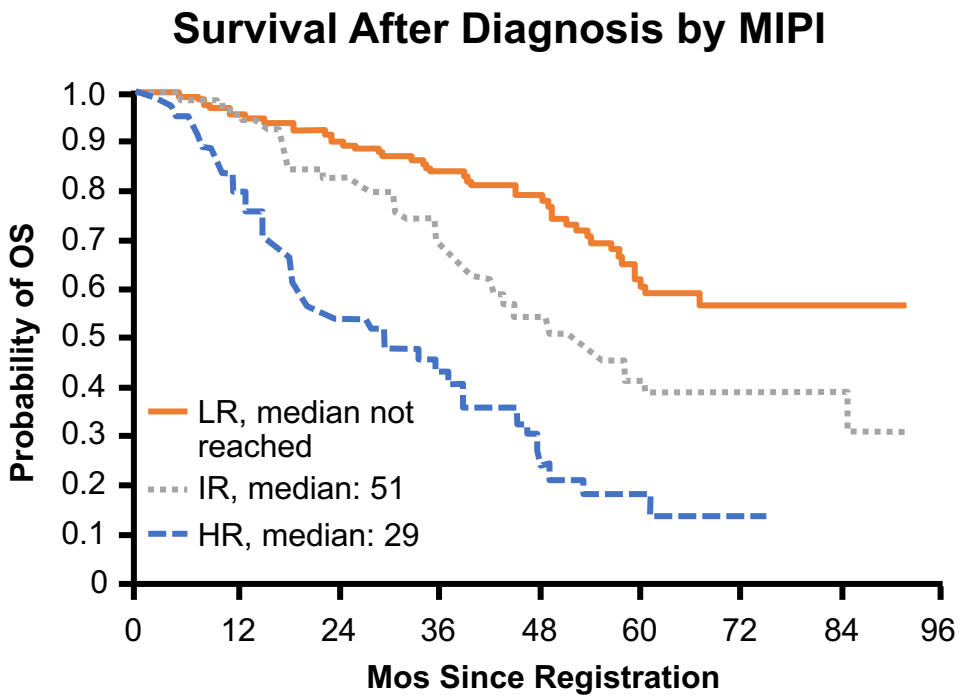
- 6% of all NHL cases
- Median age: 58 years; M:F ratio: 3:1
- Typically advanced stage
  - B symptoms: < 50% cases
  - 90% extranodal involvement: BM, blood, liver, GI
  - Generalized adenopathy: 70% to 90%
  - CNS involvement at relapse: 4% to 22% (↑ with blastoid)
- Survival is improving

Fisher RI. *Ann Oncol.* 1996;7(6S):S35-S39. Armitage JO. *Oncology* (Williston Park). 1998;12(10S8):48-55. Romaguera JE, et al. *Cancer.* 2003;97:586-591. Gill S, et al. *Leuk Lymphoma.* 2008;49:2237-2239. Lichtman MA. *Williams Hematology, 7th Ed*. The McGraw-Hill Companies; 2006.

Courtesy of Christopher Flowers, MD, MS, FASCO

Prognosis: MIPI

- 0-3 points applied for each prognostic factor
  - Low risk: 0-3 points
  - Intermediate risk: 4-5 points
  - High risk: 6-11 points

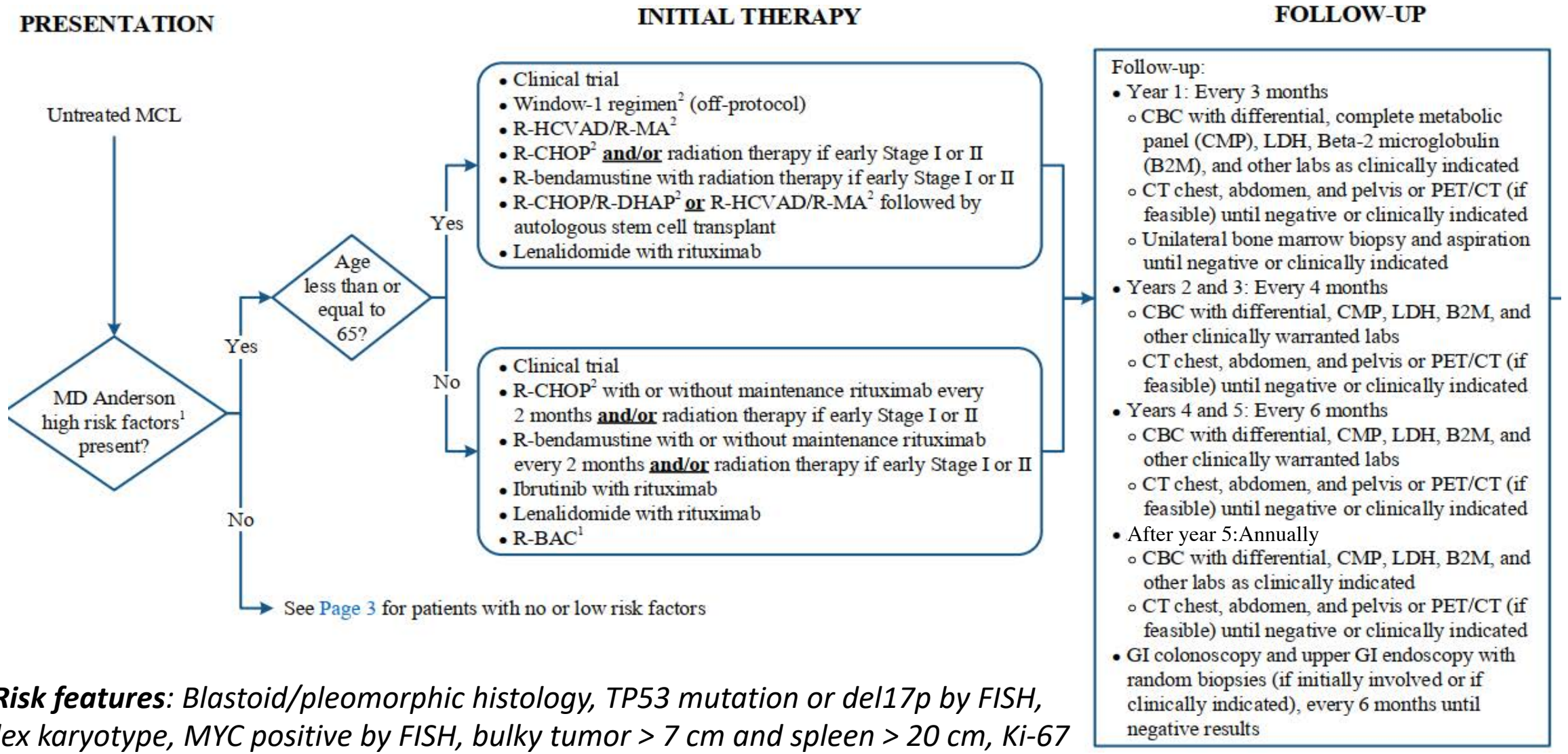


Points	Age, Yrs	ECOG PS	LDH / ULN	WBC, cells/mm^3
0	< 50	0-1	< 0.67	< 6700
1	50-59	--	0.67-0.99	6700-9999
2	60-69	2-4	1.00-1.49	10,000-14,999
3	≥ 70	--	≥ 1.50	≥ 15,000

Hoster E, et al. *Blood.* 2008;111:558-565.

Courtesy of Christopher Flowers, MD, MS, FASCO

Mantle Cell Lymphoma Frontline Care Pathway



***High Risk features**: Blastoid/pleomorphic histology, TP53 mutation or del17p by FISH, complex karyotype, MYC positive by FISH, bulky tumor > 7 cm and spleen > 20 cm, Ki-67 ≥30% in tissue biopsy*

Courtesy of Christopher Flowers, MD, MS, FASCO

MDACC MCL Algorithm 2019-20

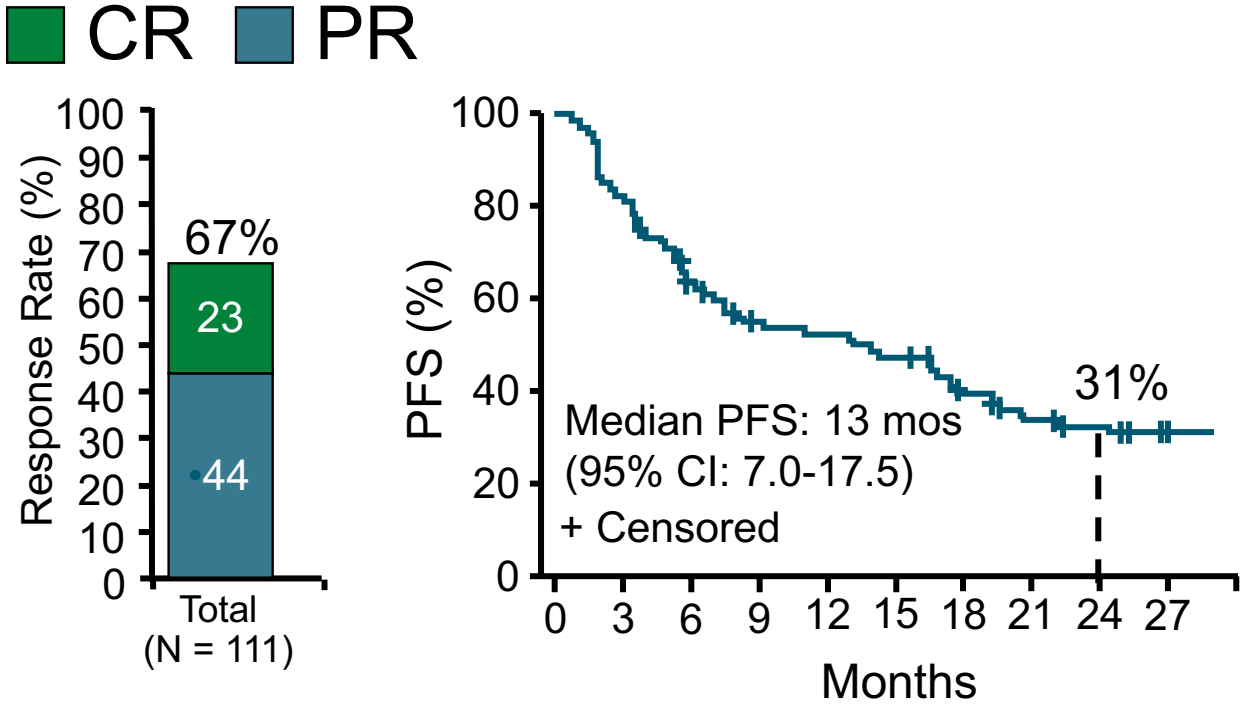
BTK Inhibitor: Multiple Options of MCL

Agent	Ibrutinib	Acalabrutinib	Zanubrutinib
Dosing	MCL and MZL: 560 mg PO QD CLL/SLL, WM, cGVHD: 420 mg PO QD	100 mg PO BID	160 mg PO BID *or* 320 mg PO QD
Indications	• MCL after ≥ 1 line of therapy (accelerated approval) • Also CLL, WM, MZL, GvHD	• MCL after ≥ 1 prior therapy (accelerated approval) • Also CLL	• MCL after ≥ 1 prior therapy (accelerated approval)

Courtesy of Christopher Flowers, MD, MS, FASCO

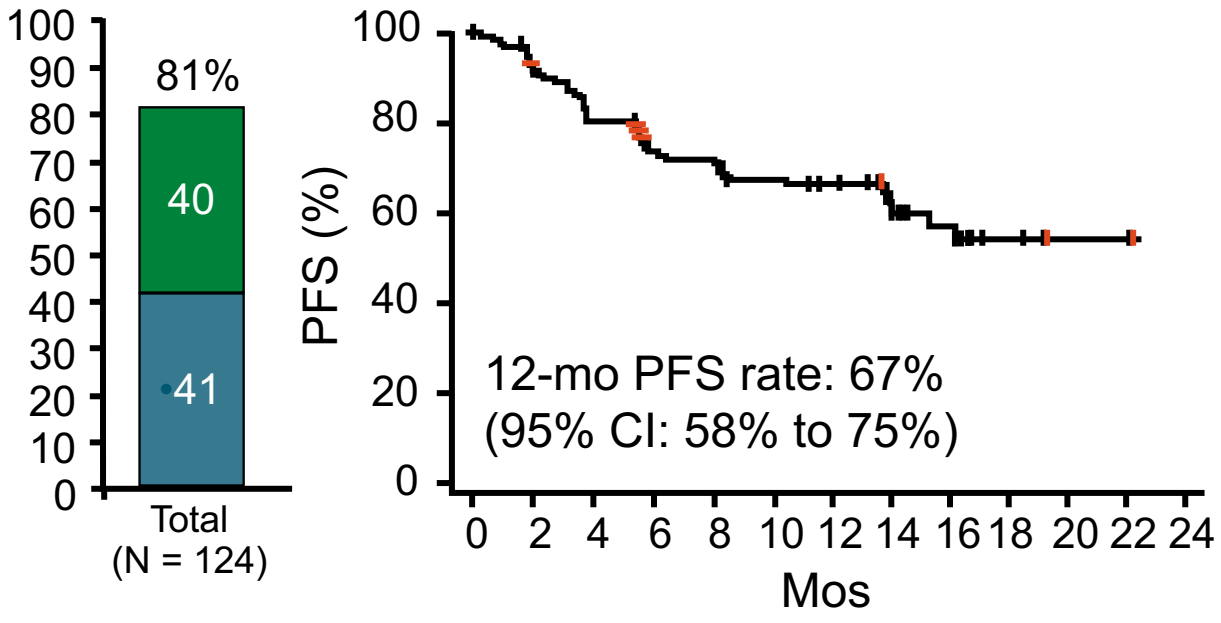
Targeting BTK in Relapsed/Refractory MCL: Ibrutinib and Acalabrutinib

Ibrutinib 560 mg PO QD (n = 111)



Wang. NEJM. 2013;369:507. Wang. Blood. 2015;126:739.

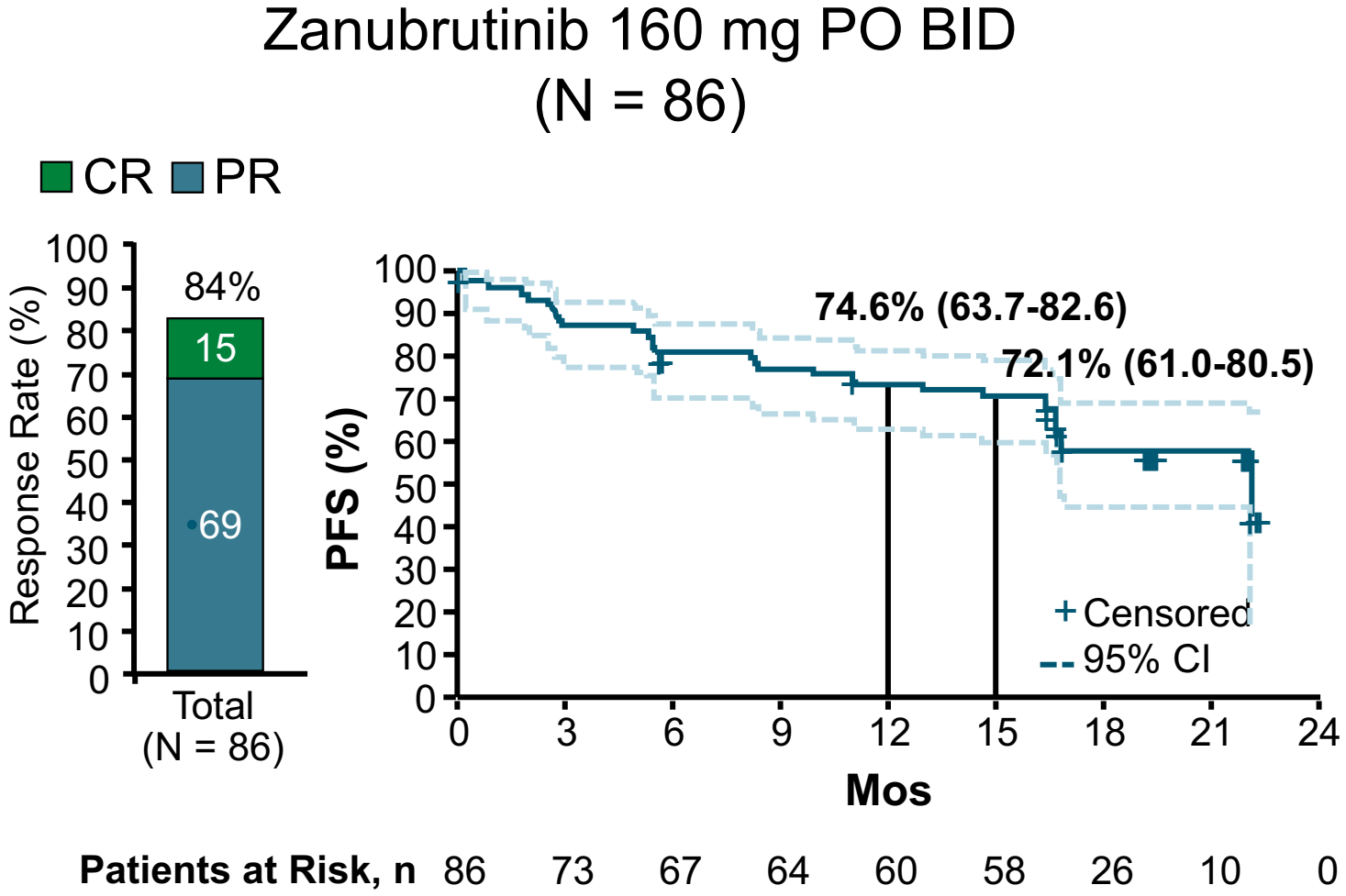
Acalabrutinib 100 mg PO BID (n = 124)



Wang. Lancet. 2018;391:659.

Courtesy of Christopher Flowers, MD, MS, FASCO

Targeting BTK in Relapsed/Refractory MCL: Zanubrutinib

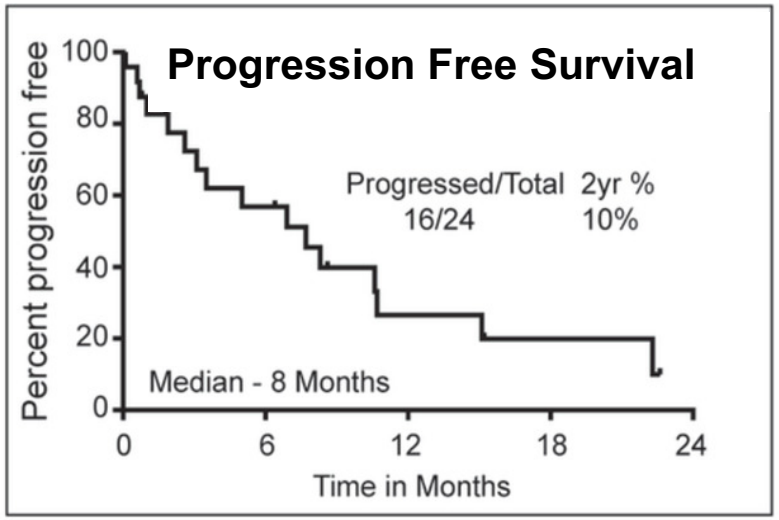


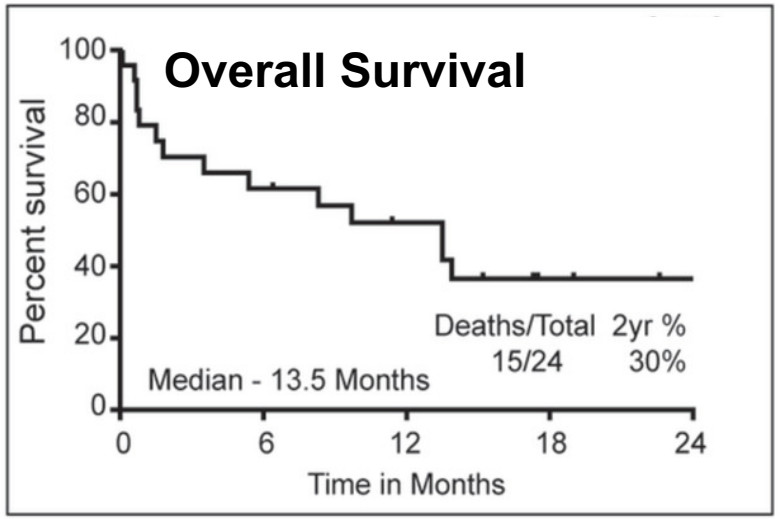
Song. Clin Canc Res. 2020.

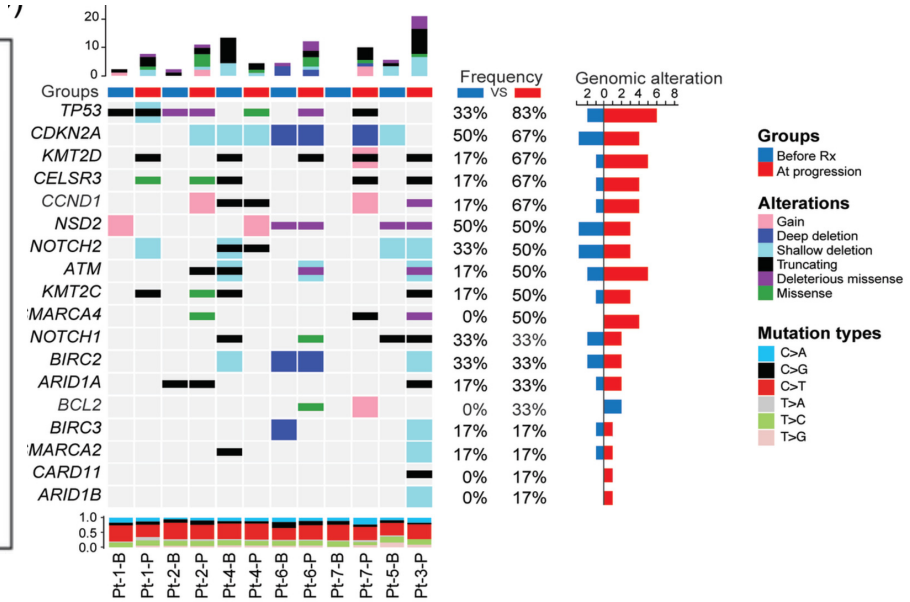
Courtesy of Christopher Flowers, MD, MS, FASCO

Venetoclax in high risk relapsed MCL: outcomes and mutation profile in venetoclax resistant patients

- multiply relapsed MCL (n=24; median 5 prior lines of therapy)
  - 67% progressed on BTK inhibitors (BTKi)
  - 54% had blastoid/ pleomorphic histology.
- ORR 50%; CR rate was 21%



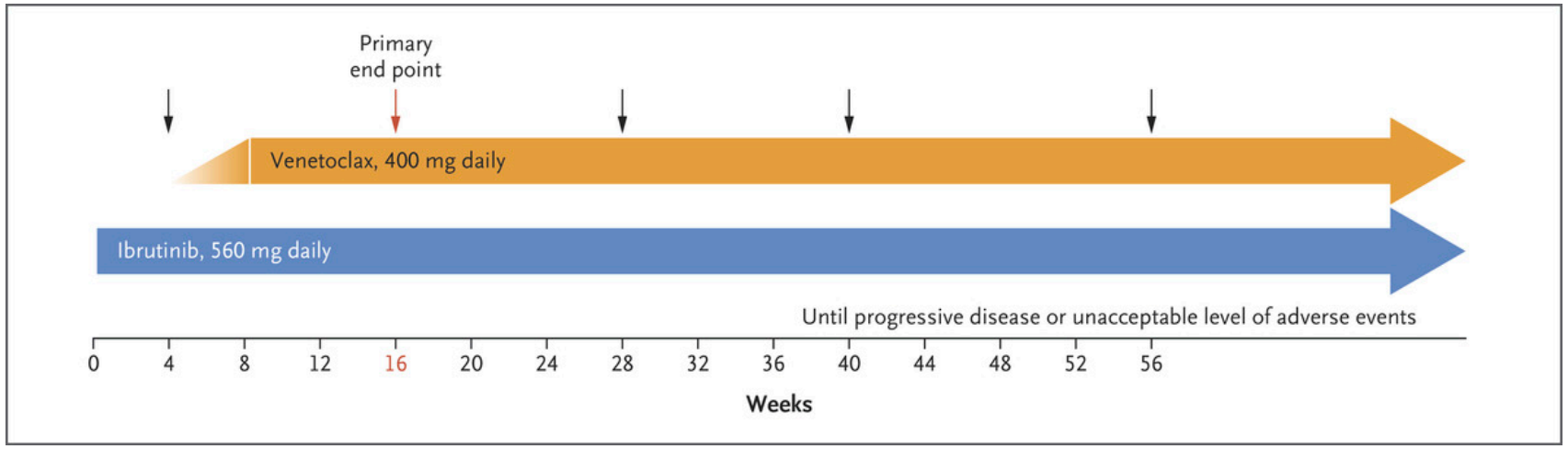


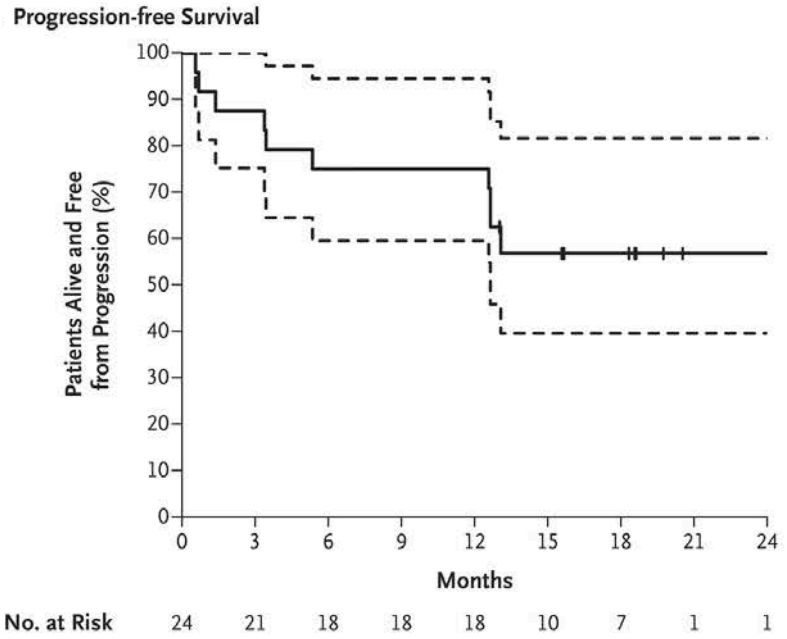


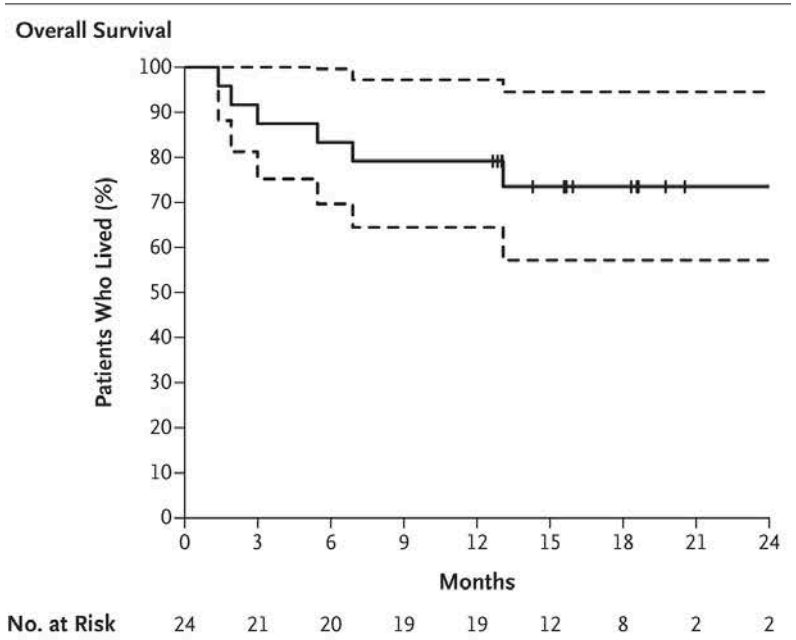
Zhao et al. Am J Hematol. 2020;95:623–629.

Courtesy of Christopher Flowers, MD, MS, FASCO

Phase 2 study of ibrutinib and venetoclax in Rel/Ref MCL







Tam et al. N Engl J Med 2018;378:1211-1223.

Courtesy of Christopher Flowers, MD, MS, FASCO

BTKi concepts in Frontline MCL Clinical Trials

- Window-1 Ibru-Rit (IR) followed by R-HCVAD-Mtx-ara-C (Young MCL; < 65 yrs)
- Window-2 – IR plus Ven followed by risk stratified R-HCVAD-Mtx-ara-C (Young)
- Acalabrutinib Venetoclax Rituximab – Multicenter study –all ages
- Zanubrutinib – rituximab vs Bendamustine Rituximab – all ages
- BTKi-rituximab in older patients
- Molecular/MRD-based stratification

Courtesy of Christopher Flowers, MD, MS, FASCO

MODULE 3: Hodgkin and T-Cell Lymphomas

- **Faculty Case – Dr Flowers**
  - A 23-Year-Old Woman with R/R cHL Achieves a CR with BV + AVD
  - **Key Relevant Data Sets**
    - Long-term follow-up of ECHELON-1: First-line BV + AVD in advanced cHL
    - BV in combination with checkpoint inhibition for HL
    - ECHELON-2: First-line BV + CHP for CD30-positive PTCL

Case Presentation – Dr Flowers: A 23-Year-Old Woman with R/R cHL Achieves a CR with Brentuximab Vedotin + AVD

- A 23-year-old African American woman presented with L cervical nodes and sore throat/tooth ache developing over several months was initially evaluated by her PCP who recommended observation
- Subsequently developed total body discomfort while drinking wine
- Most recently experienced fevers and night sweats
- Lost 15 lbs with minimal changes in exercise and diet
- Referred for lymph node biopsy -> Path below
- No past medical history
- Social history: No tobacco use; rare alcohol use; exercises regularly

Pathologic Diagnosis

- NODULAR SCLEROSIS CLASSIC HODGKIN LYMPHOMA
  - Hodgkin cells express CD30, CD15, and PAX5 (weak)
  - Negative for CD3, CD20, and CD45

Case Presentation – Dr Flowers: A 23-Year-Old Woman with R/R cHL Achieves a CR with Brentuximab Vedotin + AVD (continued)

Laboratories

- WBC 13.8 (85% PMN's)
- **Hgb 9.5**
- Plts 571
- ESR 40
- **Albumin 3.2**
- **ALC 500/mm^3**
- HIV/Hepatitis negative

Staging PET/CT

- Intrathoracic adenopathy
- R cervical 2.8 x 3.9 (SUV 9.3)
- L cervical 2.5 x 1.4 (SUV 8.8)
- Ant Mediastinum 6.8 x 2.9 (SUV 21.3)
- R axillary 3.2 x 2.4 (SUV 12.2)
- Spleen SUV 2.9 with normal size
- FDG-PET/CT
  - Diffuse uptake in the axial skeleton (SUVs 4.9-5.5)
  - Background: Mediastinum SUV 1.8 / Liver 2.4
- **Stage IV** Deauville score: 5

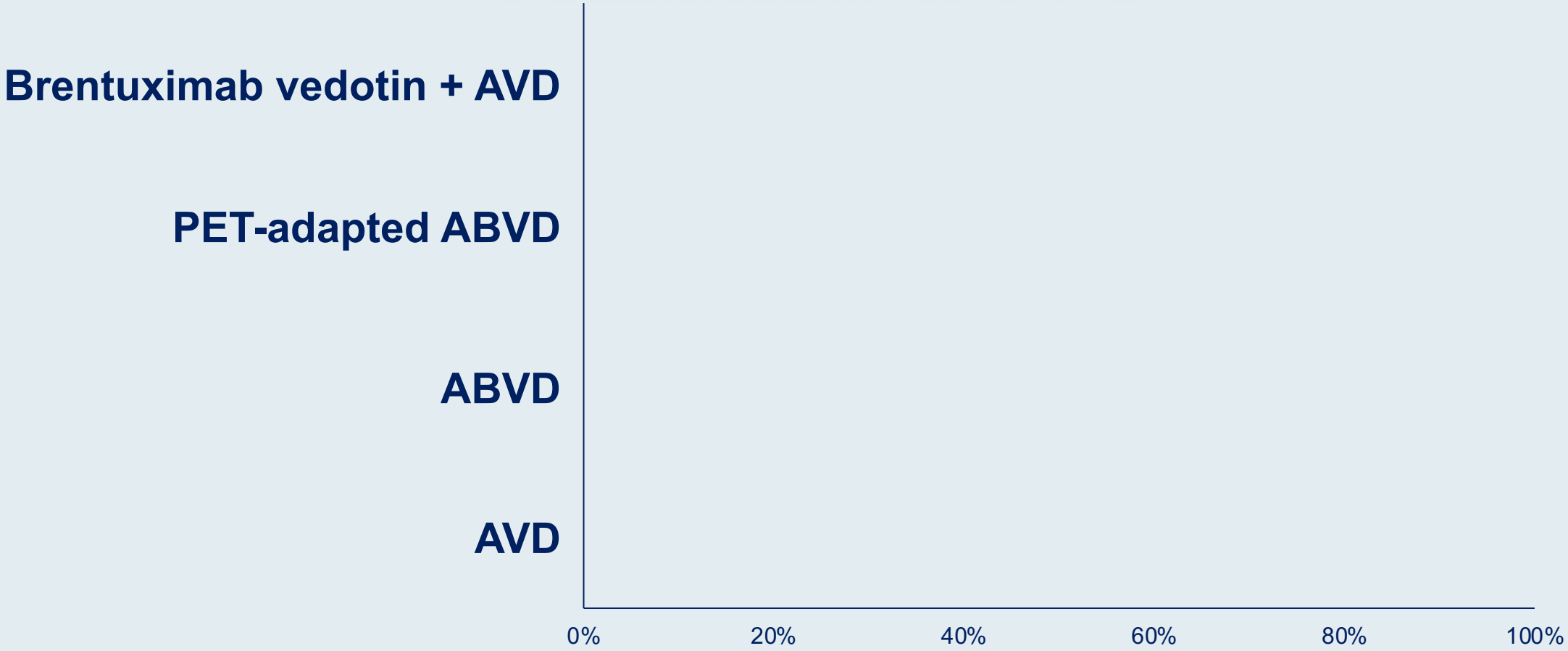
Case Presentation – Dr Flowers: A 23-Year-Old Woman with R/R cHL Achieves a CR with Brentuximab Vedotin + AVD (continued)

- She was treated with brentuximab vedotin + AVD
- Interim PET/CT after 2 cycles with Deauville 3
- Tolerated well with GCSF support
- Completed 6 Cycles brentuximab vedotin + AVD – Achieved PET - CR

Score	Definition
1	No uptake
2	Uptake ≤ mediastinum
3	Uptake > mediastinum but ≤ liver
4	Moderately increased uptake compared to the liver
5	Markedly increased uptake compared to the liver and/or new lesions
X	New areas of uptake unlikely to be related to lymphoma

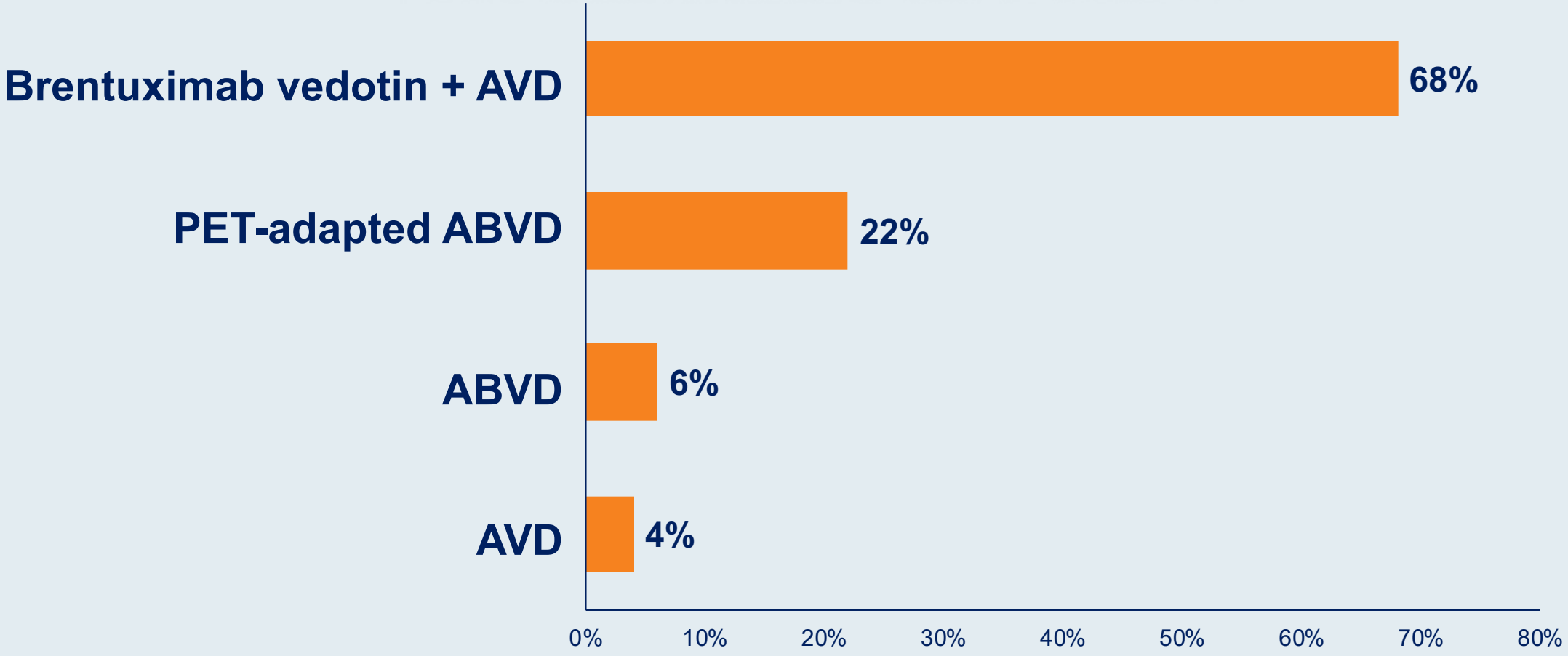
Barrington SF. *Eur J Nucl Med Mol Imaging.* 2017;44(Suppl 1):97-110.

A 54-year-old man with a history of COPD secondary to heavy smoking is diagnosed with Stage IVB classical Hodgkin lymphoma (HL) with liver, nodal, spleen and bone involvement. What initial treatment would you recommend?



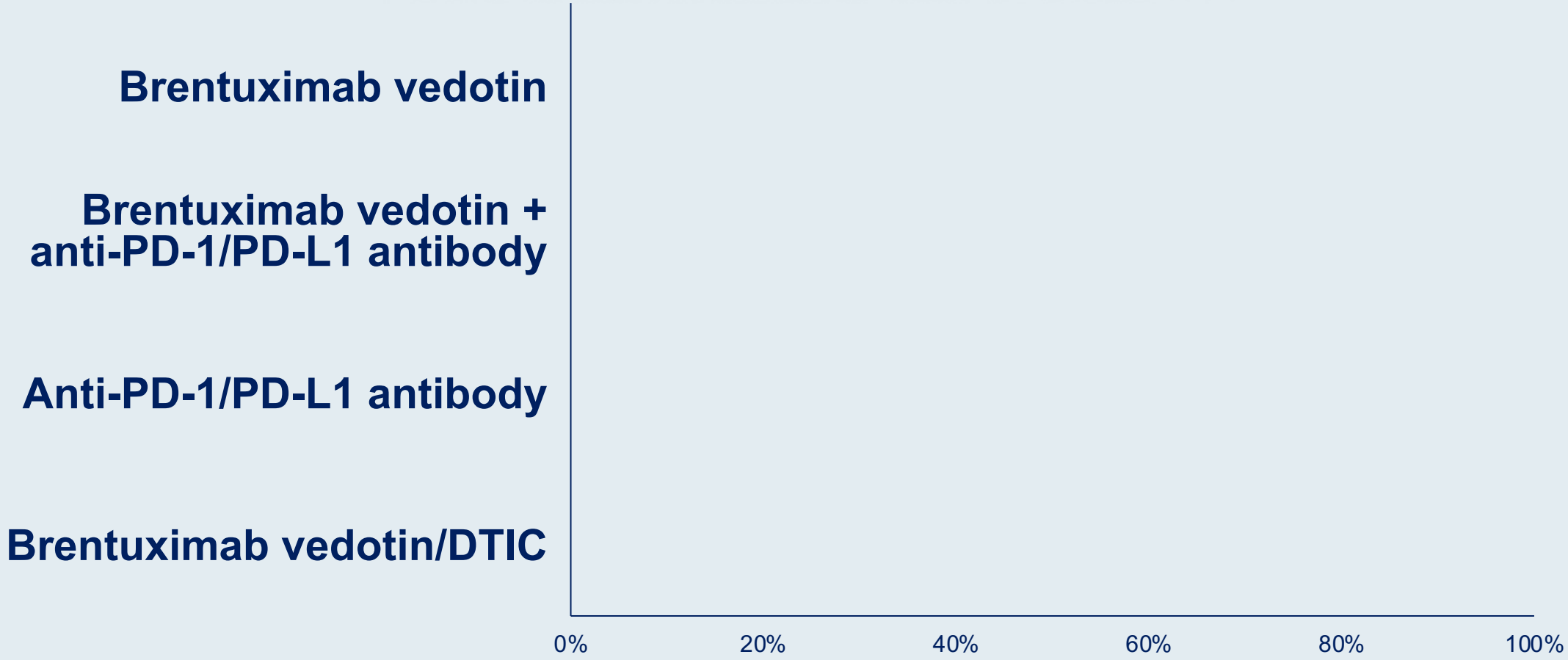
Survey of 50 US-based medical oncologists

A 54-year-old man with a history of COPD secondary to heavy smoking is diagnosed with Stage IVB classical Hodgkin lymphoma (HL) with liver, nodal, spleen and bone involvement. What initial treatment would you recommend?



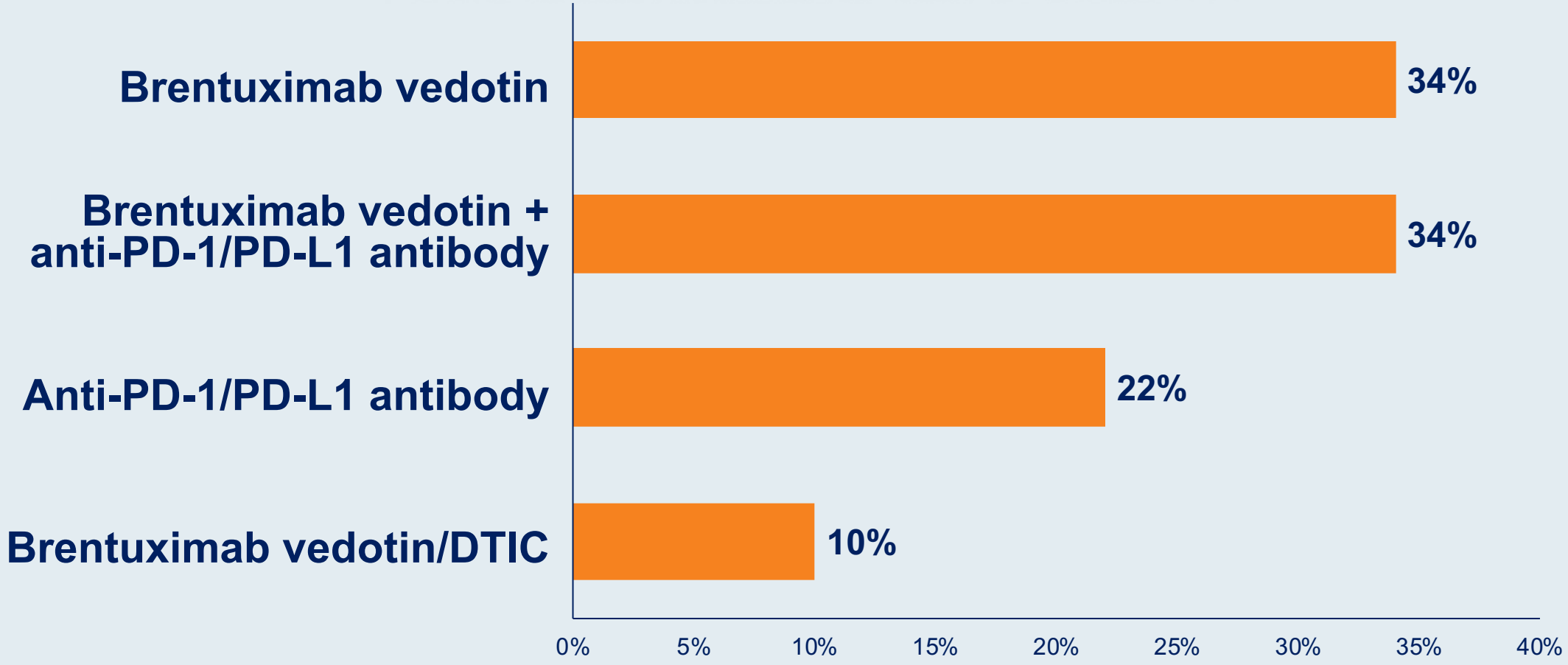
Survey of 50 US-based medical oncologists

An 85-year-old frail patient with advanced-stage symptomatic HL is not a candidate for aggressive chemotherapy but is seeking active treatment. Regulatory and reimbursement issues aside, what would you recommend?



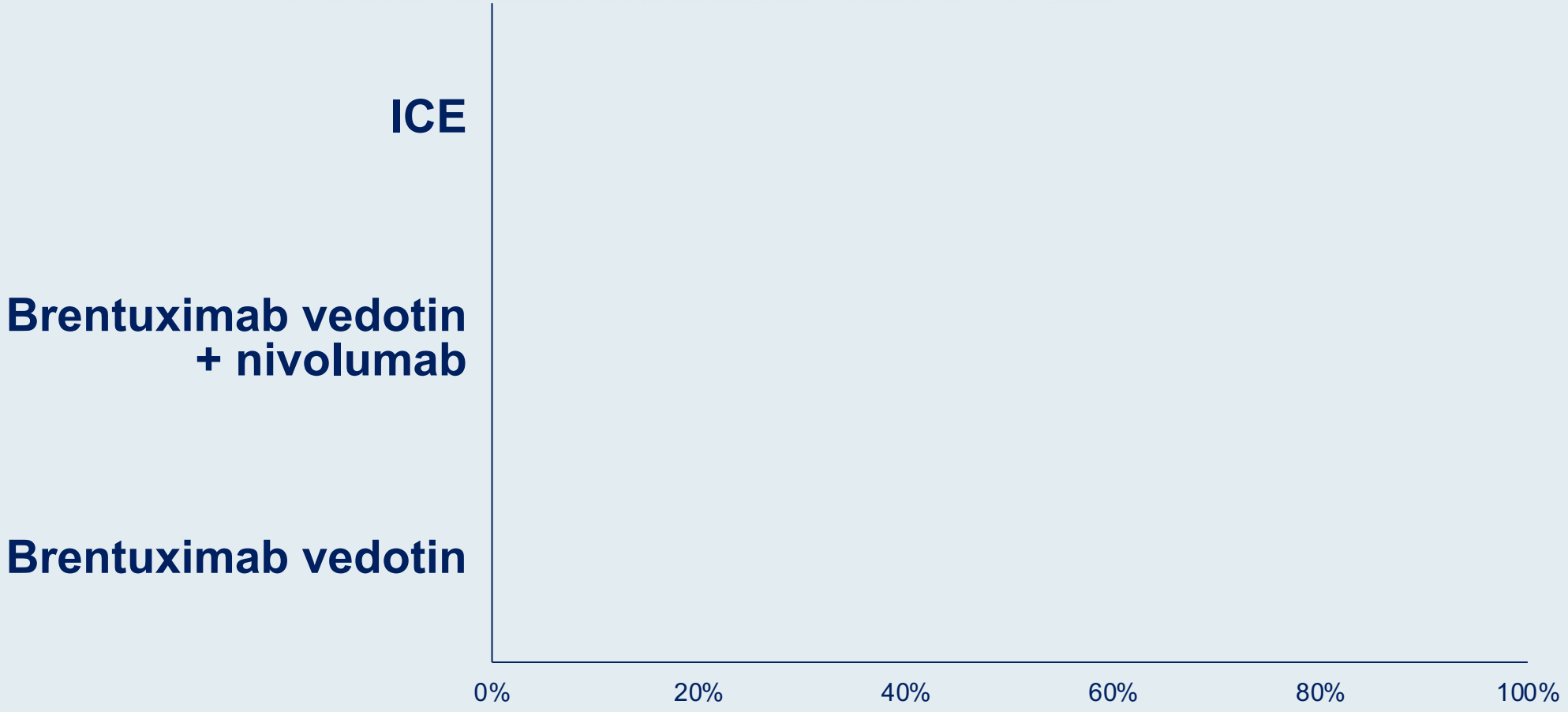
Survey of 50 US-based medical oncologists

An 85-year-old frail patient with advanced-stage symptomatic HL is not a candidate for aggressive chemotherapy but is seeking active treatment. Regulatory and reimbursement issues aside, what would you recommend?



Survey of 50 US-based medical oncologists

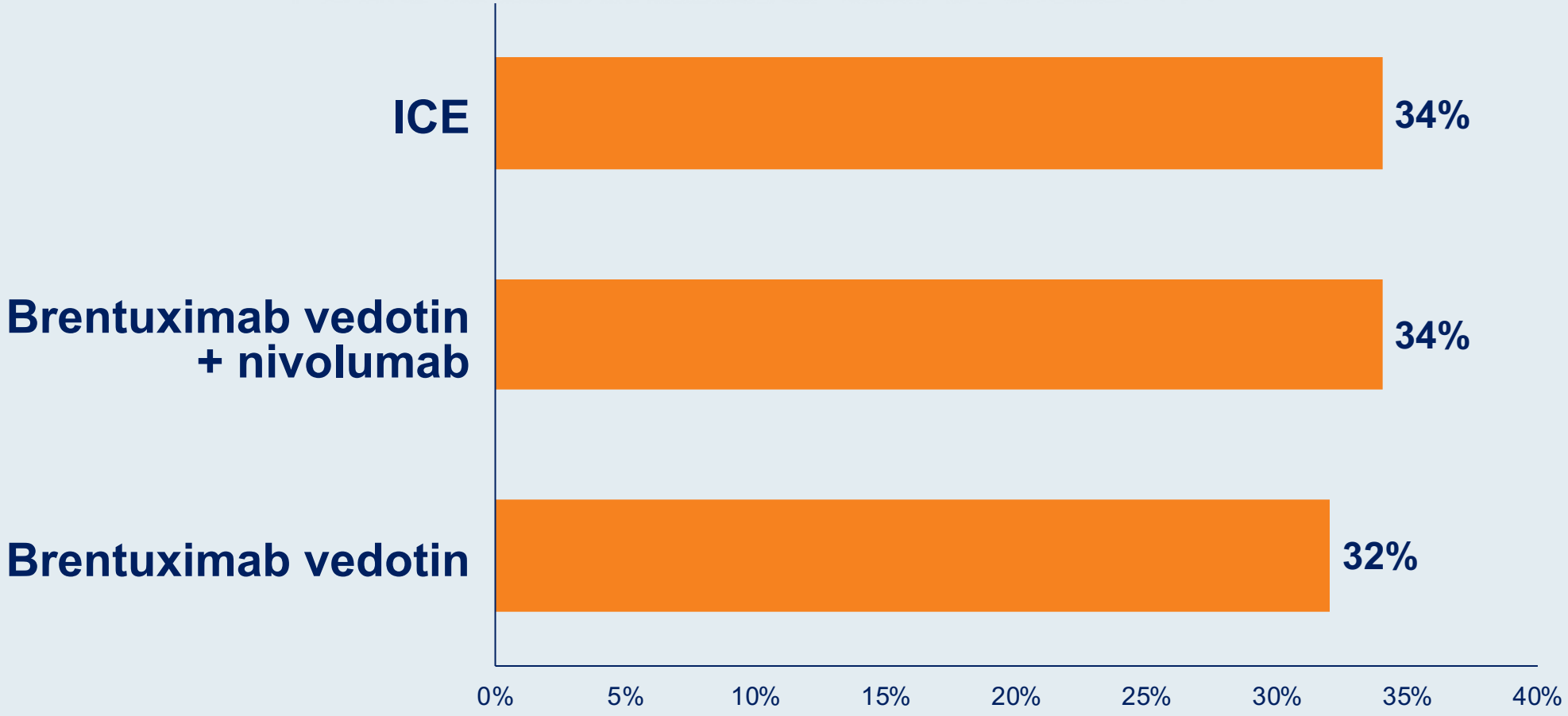
Regulatory and reimbursement issues aside, in general, what would be your preferred bridge to transplant for a patient with HL who is experiencing relapse after up-front ABVD?



ICE = ifosfamide/carboplatin/etoposide

Survey of 50 US-based medical oncologists

Regulatory and reimbursement issues aside, in general, what would be your preferred bridge to transplant for a patient with HL who is experiencing relapse after up-front ABVD?

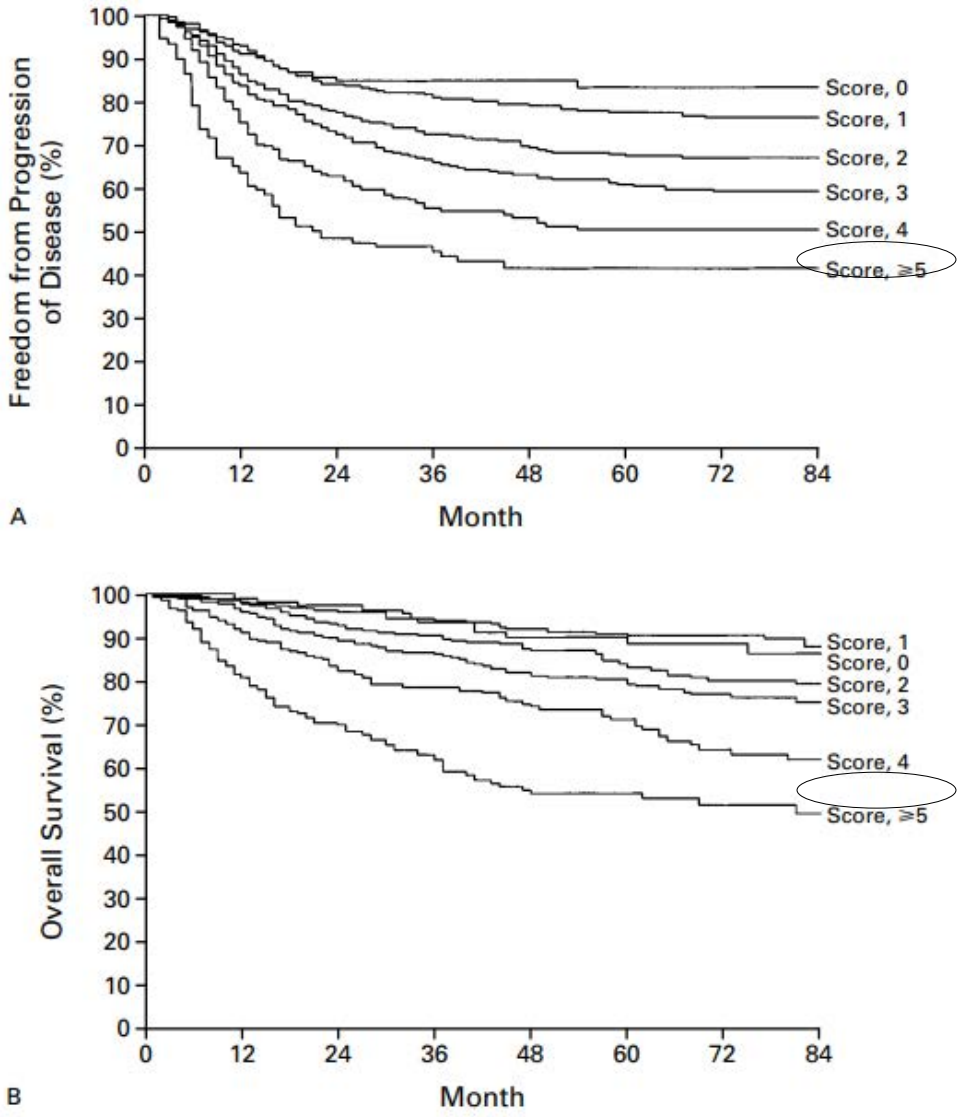


ICE = ifosfamide/carboplatin/etoposide

Survey of 50 US-based medical oncologists

Hodgkin Lymphoma International Prognostic Score

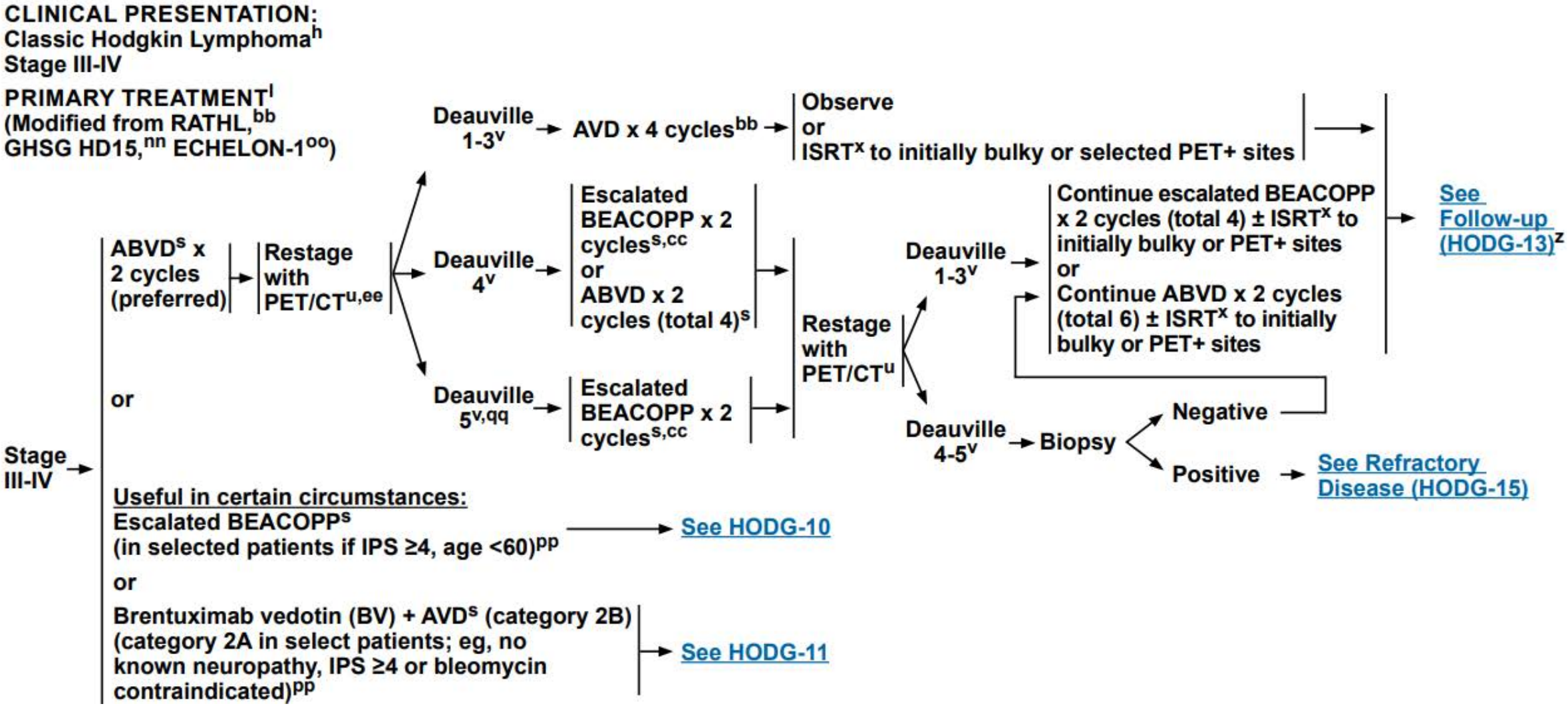
- Serum albumin < 4 g/dL
- Hgb < 10.5 g/dL
- Male sex
- Age ≥ 45
- Stage IV disease (according to the Ann Arbor classification)
- White-cell count ≥ 15,000/mm^3
- Lymphocyte count < 600/mm^3, a count that was < 8% the white-cell count, or both.



Hasenclever D, et al. *N Engl J Med.* 1998;339:1506-1514.

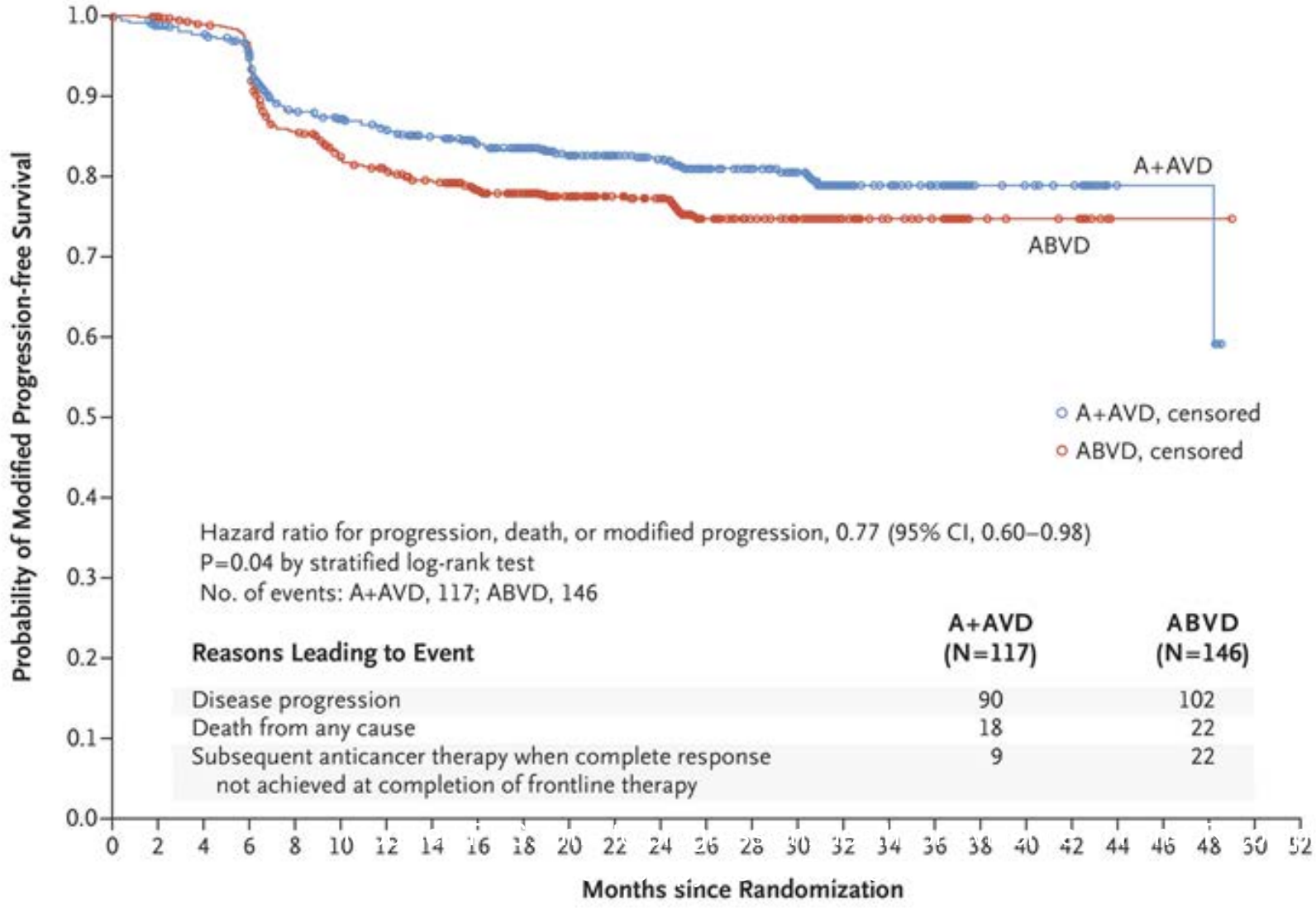
Courtesy of Christopher Flowers, MD, MS, FASCO

NCCN Guidelines Advanced Stage HL



Courtesy of Christopher Flowers, MD, MS, FASCO

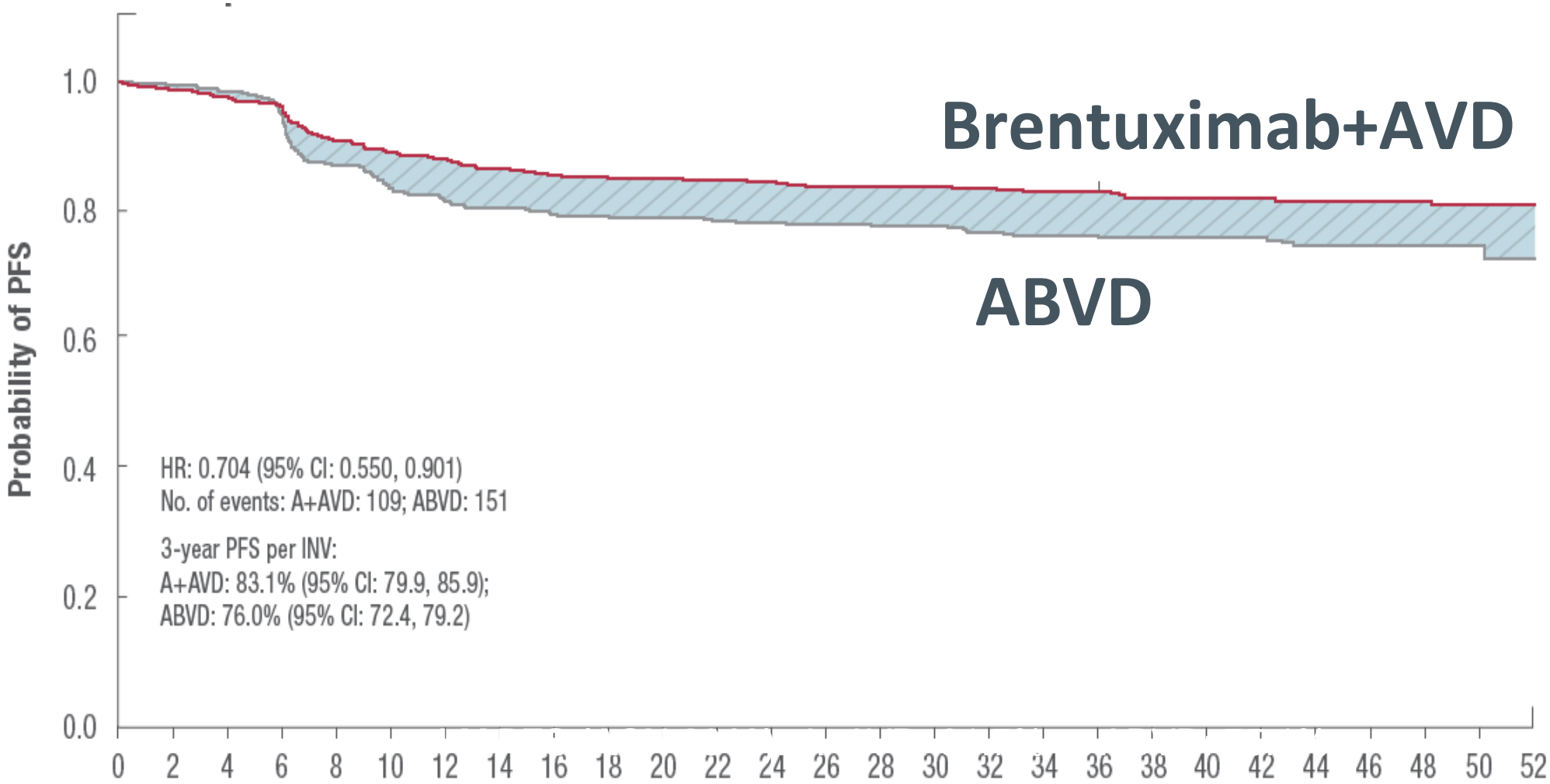
ECHELON-1: Modified PFS—Independent Central Review



Connors JM et al. *N Engl J Med*. 2018;378:331-344.

Courtesy of Christopher Flowers, MD, MS, FASCO

ECHELON-1: 3- and 4-Year PFS



Connors JM et al. *N Engl J Med*. 2018;378:331-344.
Bartlett NL, et al. ASH 2019. Abstract 4026.

Courtesy of Christopher Flowers, MD, MS, FASCO

ECHELON-1: Brentuximab Vedotin with Chemotherapy for Stage III or Stage IV Classical HL (3-Year Update)

Summary of 3-year PFS by PET2 status and age

3-year PFS per investigator, % (95% CI)	A + AVD n = 664	ABVD n = 670	HR (95% CI) *p*-value
All patients (ITT)	83.1 (79.9-85.9)	76.0 (72.4-79.2)	0.70 (0.55-0.90) 0.005
PET2-negative	85.8 (82.6-88.5) n = 577	79.5 (75.8-82.7) n - 573	0.69 (0.52-0.91) 0.009
PET2-positive	67.7 (53.8-78.3) n = 58	51.5 (38.2-63.4) n = 63	0.59 (0.33-1.07) 0.077
Patients aged <60 years	84.9 (81.6-87.7) n = 580	77.8 (73.9-81.1) n = 568	0.69 (0.52-0.91) 0.008
Age <60 years and PET2-	87.2 (83.9-89.9) n = 512	81.0 (77.1-84.4) n = 489	0.71 (0.51-0.98) 0.034
Age <60 years and PET2+	69.2 (54.1-80.1) n = 51	54.7 (40.0-67.2) n = 54	0.60 (0.32-1.15) 0.117

CI = confidence interval

Gallamini A et al. EHA 2019;Abstract S820.

ECHELON-1: TOXICITY

INITIAL REPORT[1]	A-AVD		ABVD	
Any grade ≥ 3	83%		66%	
Hospitalizations	37%		28%	
Grade ≥ 3 ANC	54%		39%	
Febrile Neutropenia (+/- G-CSF prophylaxis)	21%	11%	8%	7%
Peripheral sensory neuropathy grade ≥ 3	5%		<1%	
4 year follow-up: Peripheral Neuropathy[2]				
Grade 1/2	19%		10%	
Grade 3/4	3% (N = 17)		0.6% (N = 4)	

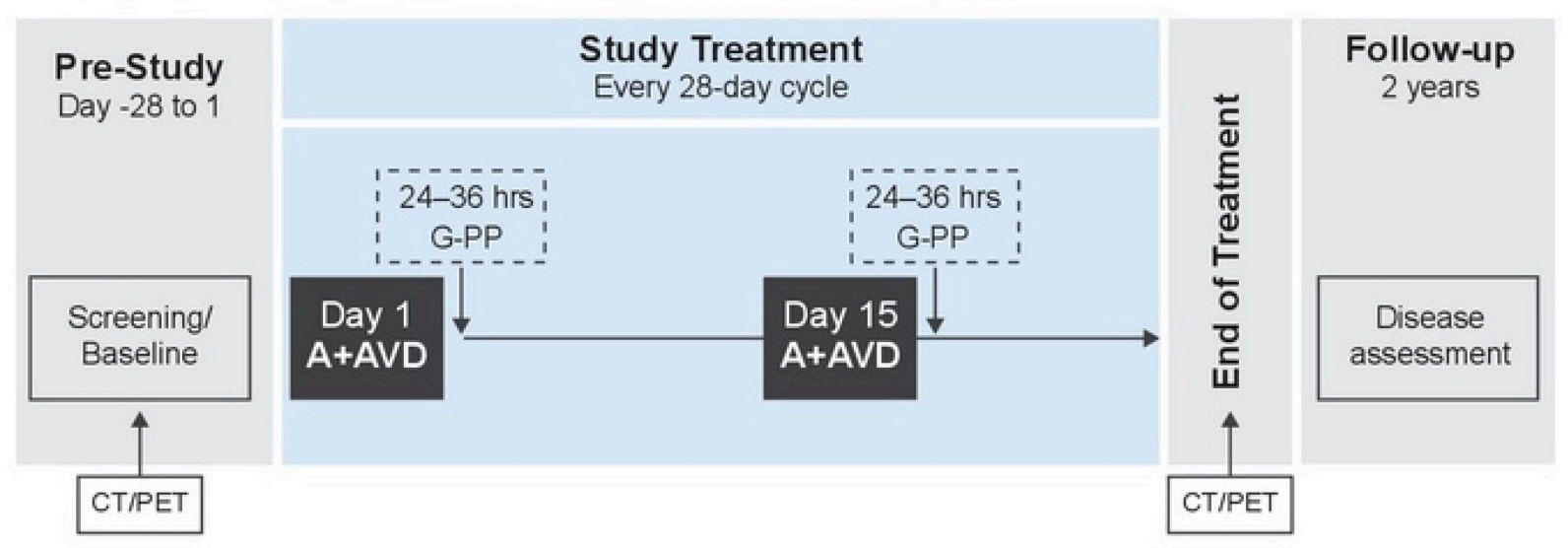
[1] Connors JM et al. *N Engl J Med* 2018;378:331-44.
[2] Bartlett NL et al. *Proc ASH* 2019;Abstract 4026.

Brentuximab vedotin in combination with nivolumab, doxorubicin, and dacarbazine in newly diagnosed patients with advanced-stage Hodgkin lymphoma

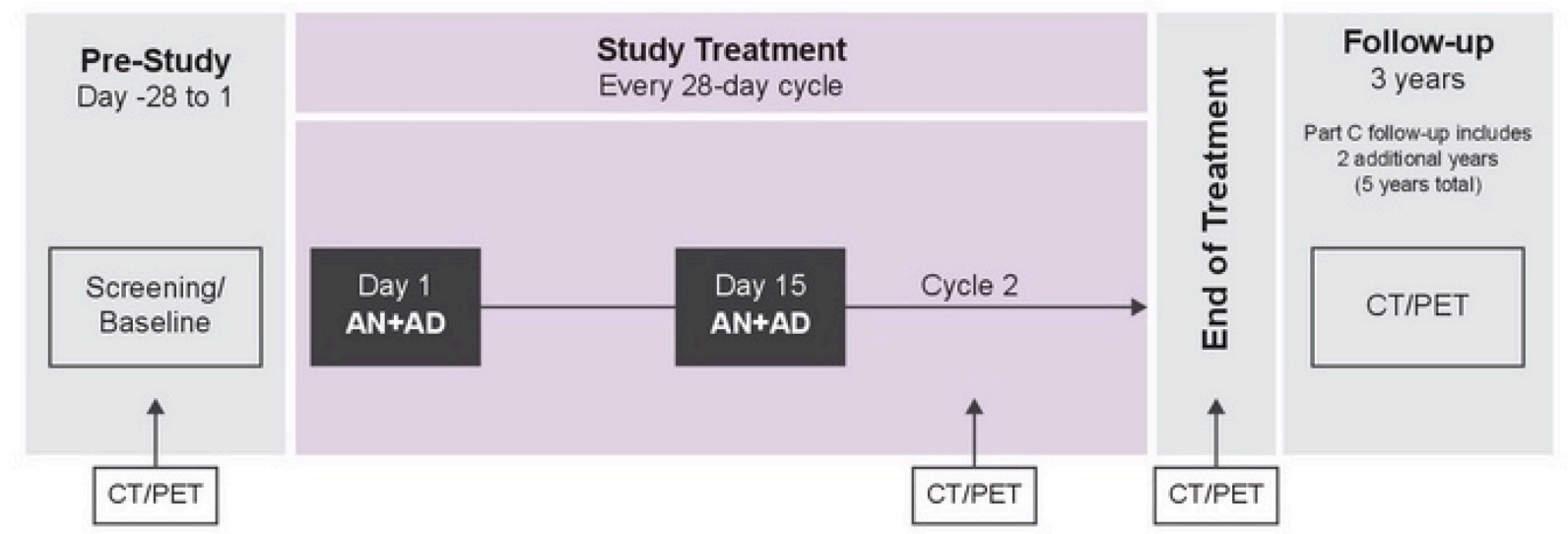
Friedman JD et al.

ASCO 2020; Abstract TPS8068.

SGN35-027 Phase II Study of BV in combination with nivolumab, doxorubicin, and dacarbazine in newly diagnosed HL



Part A
Evaluate the rate of treatment-emergent FN following granulocyte colony stimulating factor (G-PP) plus A+AVD



Part B and C
Assess CR at the end of treatment with AN + AD in previously untreated advanced cHL (Part B) or previously untreated early-stage cHL (Part C)

Friedman JD et al. ASCO 2020; Abstract TPS8068.

Phase II, multicenter trial of nivolumab (Nivo) and brentuximab vedotin (BV) in patients (Pts) with untreated Hodgkin lymphoma (HL) over the age of 60 years or unable to receive standard ABVD chemotherapy: Results of a study of Academic and Community Cancer Research United (ACCRU) RU051505I

Cheson BD et al.

ASCO 2020; Abstract 8014.

ACCRU RU051505I: Response to BV-Nivolumab

Table 2. Response to BV-nivo	Total (N=46)
Cycle 8 Metabolic Response n (%)	
CMR	22 (47.8%)
PMR	6 (13.0%)
PMD	7 (15.2%)
Off before cycle 8	11 (23.9%)
Response Rate (%)(95% CI)	60.9 (45.4, 74.9)
Best Overall Response Rate (%) (95% CI), (All Cycles)	91.3 (79.2, 97.6)
CMR	30 (65.2%)
PMR	12 (26.1%)
NMR	1 (2.2%)
PMD	1 (2.2%)
Not evaluated	2 (4.3%)
Median Duration of Response	Not reached
Median Overall Survival	Not reached

Cheson BD et al. ASCO 2020;Abstract 8014.

Brentuximab vedotin and bendamustine as first-line treatment of Hodgkin lymphoma in the elderly (HALO Trial)

Schiano de Colella JM et al.

ASCO 2020; Abstract 8029.

HALO: Efficacy of BV and Bendamustine as First-Line Treatment

- After a median follow-up of 20.6 months
  - 33 out of 59 (56%) were in CR
  - 2-year OS (ITT): 84%
  - 2-year PFS (ITT): 55%

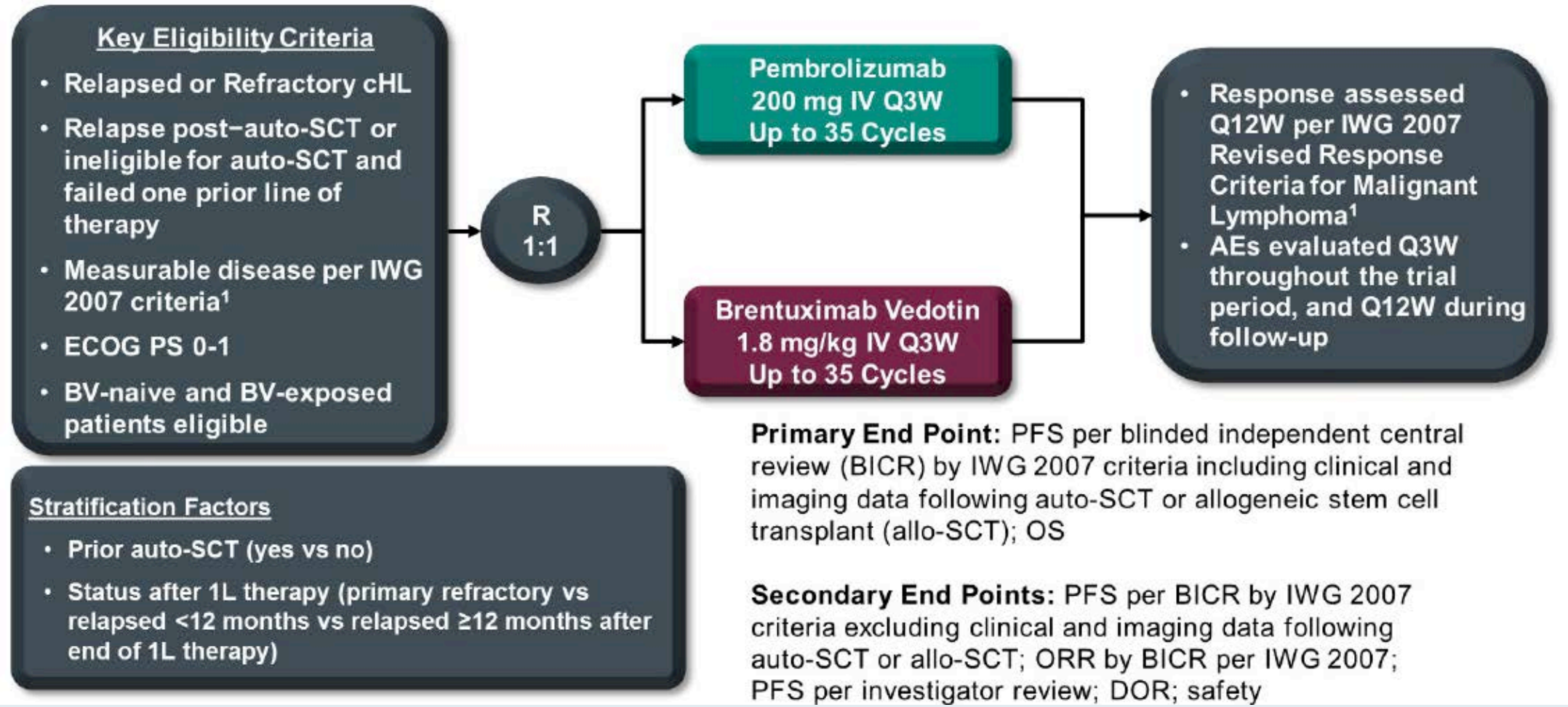
Schiano de Colella JM et al. ASCO 2020; Abstract 8029.

KEYNOTE-204: Randomized, open-label, phase III study of pembrolizumab (pembro) versus brentuximab vedotin (BV) in relapsed or refractory classic Hodgkin lymphoma (R/R cHL).

Kuravilla J et al.

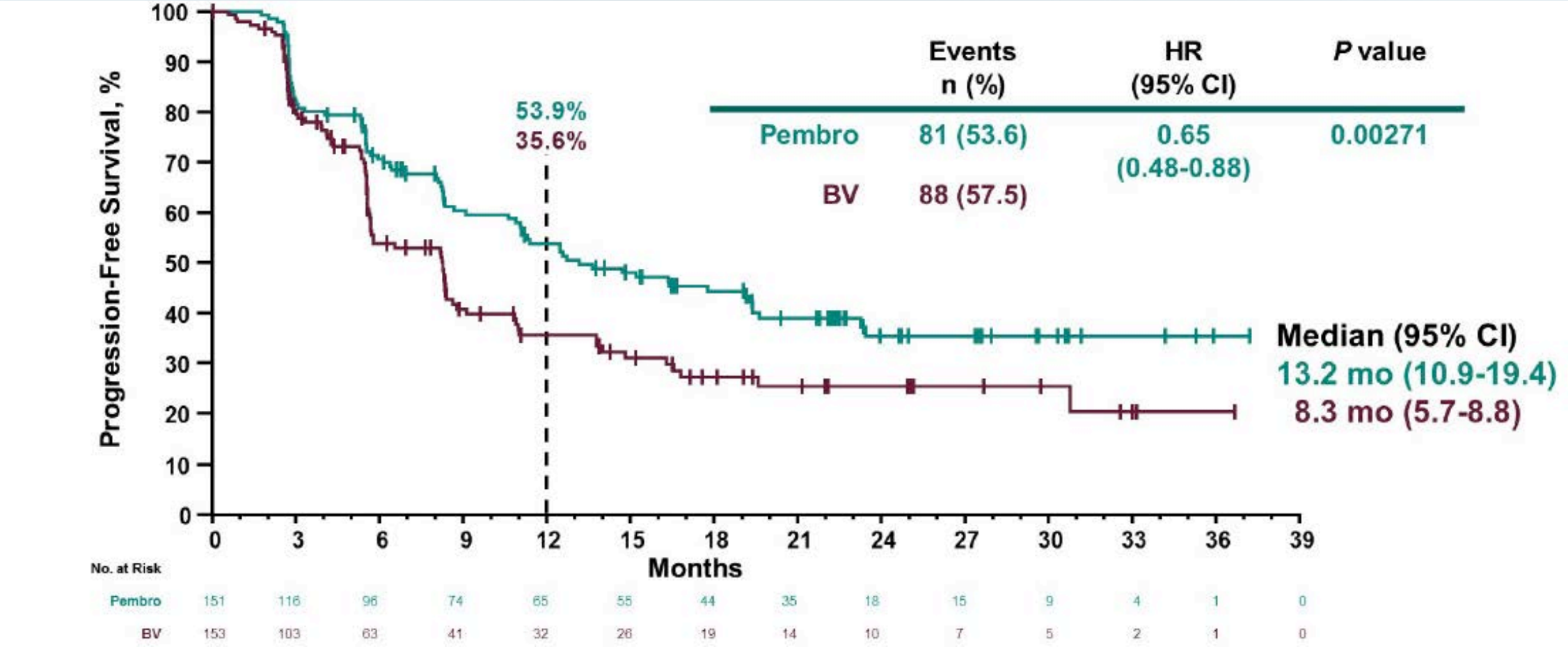
ASCO 2020; Abstract 8005.

KEYNOTE-204: Phase III Schema



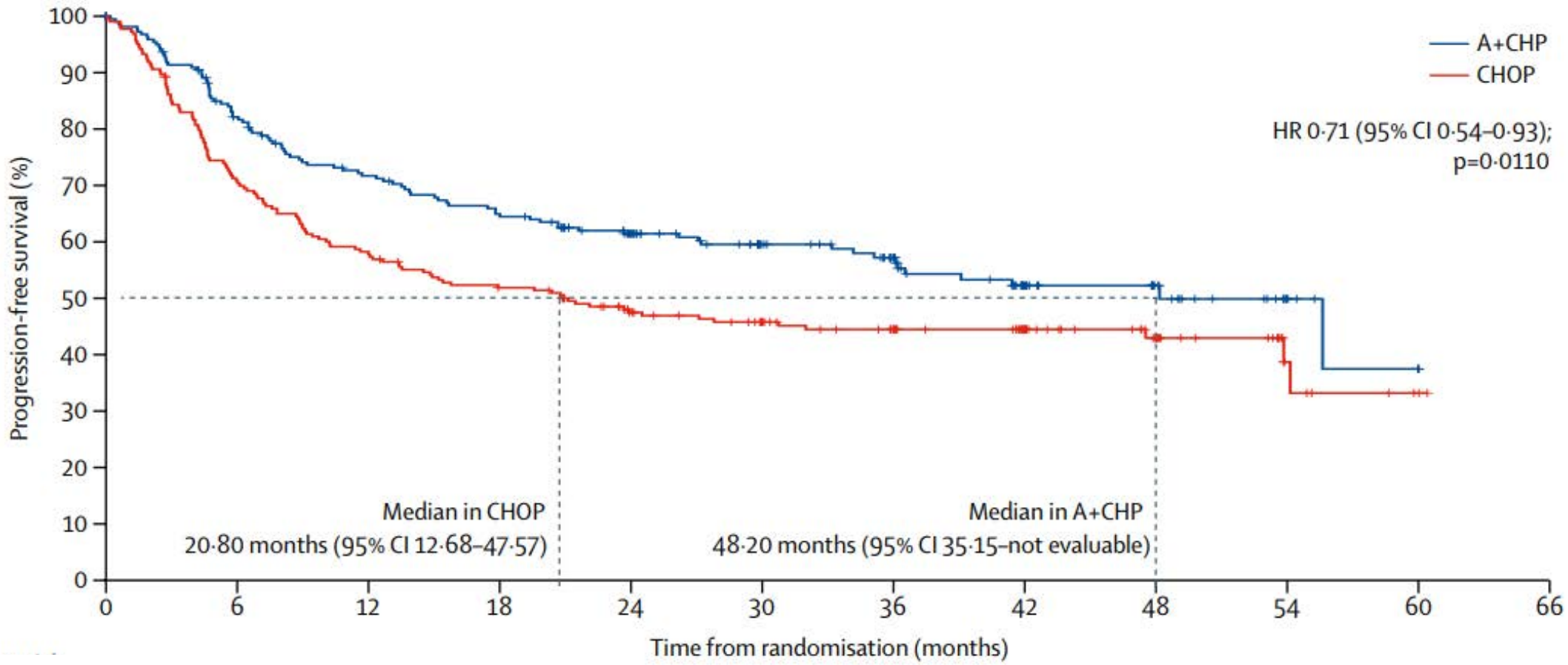
Kuruvilla J et al. Proc ASCO 2020;Abstract 8005.

KEYNOTE-204: Progression-Free Survival (Primary Endpoint)



Kuruvilla J et al. Proc ASCO 2020;Abstract 8005.

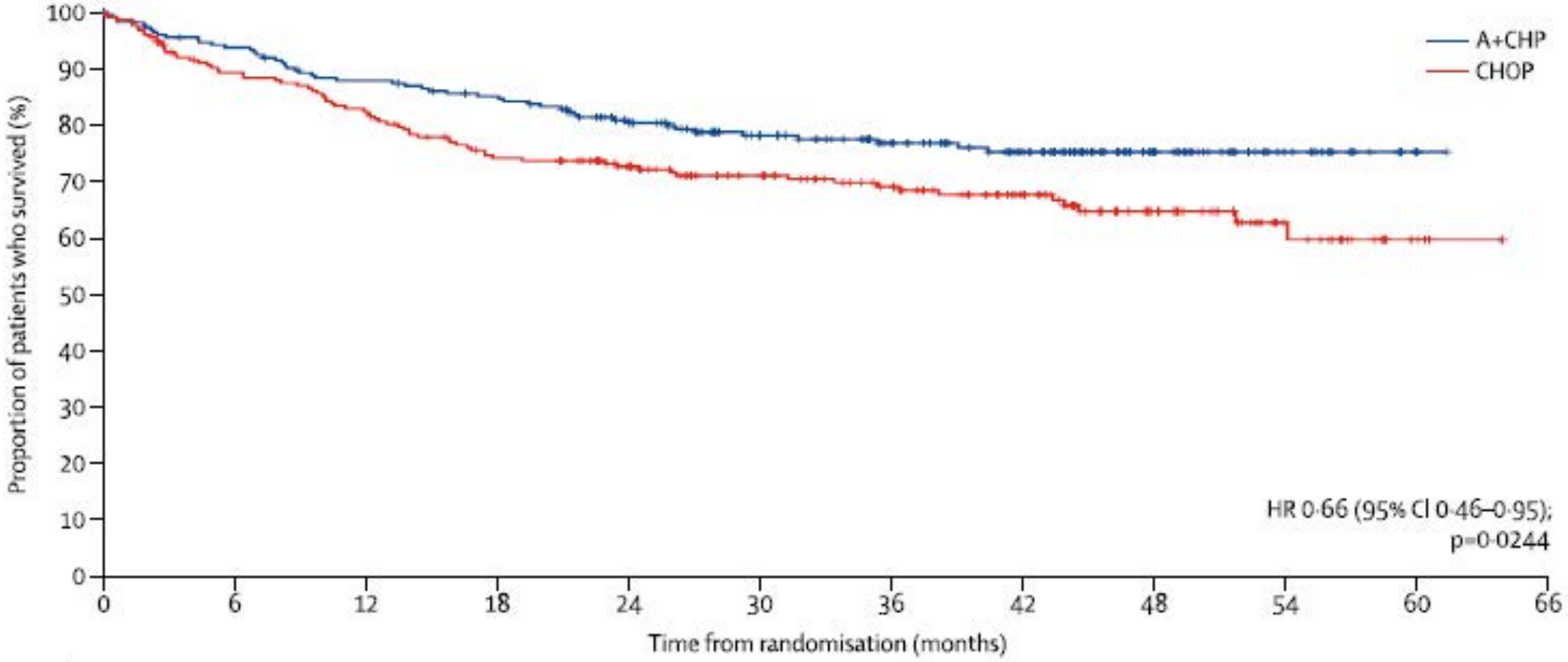
ECHELON-2: First-Line Brentuximab Vedotin and CHP vs CHOP for CD30+ PTCL—PFS Primary Endpoint



Horwitz S, et al. *Lancet.* 2019;393:229-240.

Courtesy of Christopher Flowers, MD, MS, FASCO

ECHELON-2: First-Line Brentuximab Vedotin and CHP Vs CHOP for CD30+ PTCL— OS



Horwitz S, et al. *Lancet.* 2019;393:229-240.

Courtesy of Christopher Flowers, MD, MS, FASCO

Clinical Investigator Perspectives on the Current and Future Management of Multiple Myeloma

Tuesday, August 11, 2020

5:00 PM – 6:00 PM ET

Faculty

Robert Z Orlowski, MD, PhD

Moderator

Neil Love, MD

RTP
RESEARCH TO PRACTICE

Thank you for joining us!

CME and MOC credit information will be emailed to each participant within 5 days.