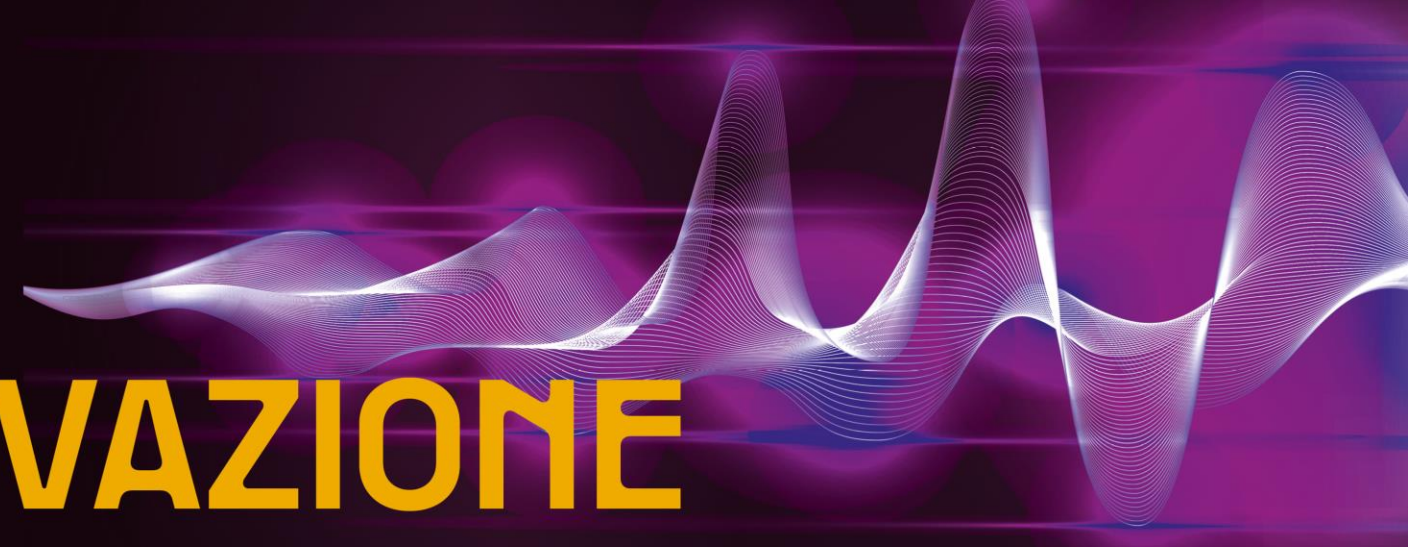




Il suono **DELL' INNOVAZIONE**

Bologna Palazzo De' Toschi

27-28 novembre 2025

La ridefinizione dell' alto rischio nella CLL

Luca Laurenti

Fondazione Policlinico Universitario A Gemelli-IRCCS-Roma

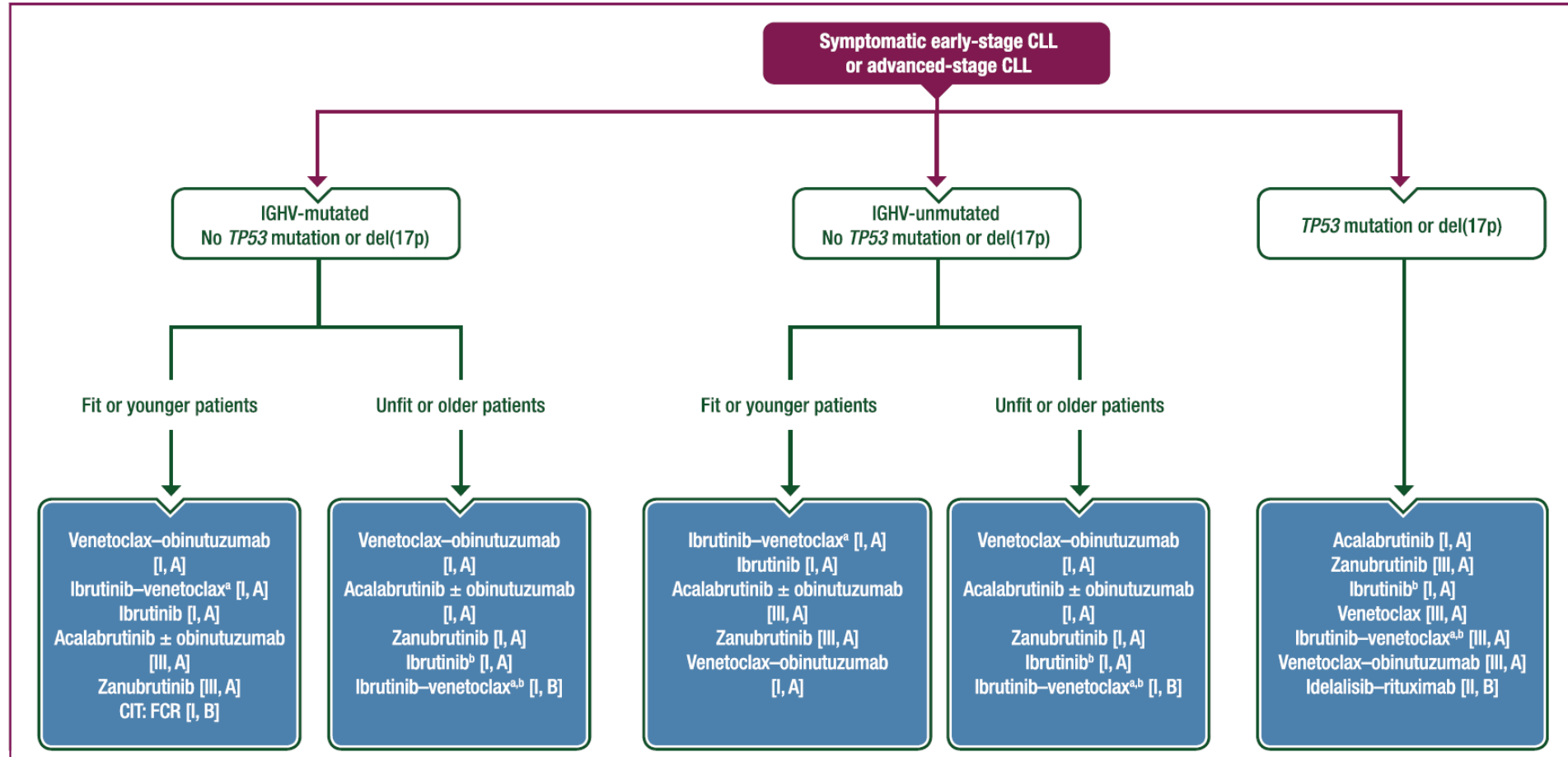
DISCLOSURES

Company name	Research support	Employee	Consultant	Stockholder	Speakers bureau	Advisory board	Other
Abbvie	X				X	X	
AstraZeneca	X				X	X	
Beigene					X	X	
Johnson & Johnson					X	X	
Lilly					X	X	



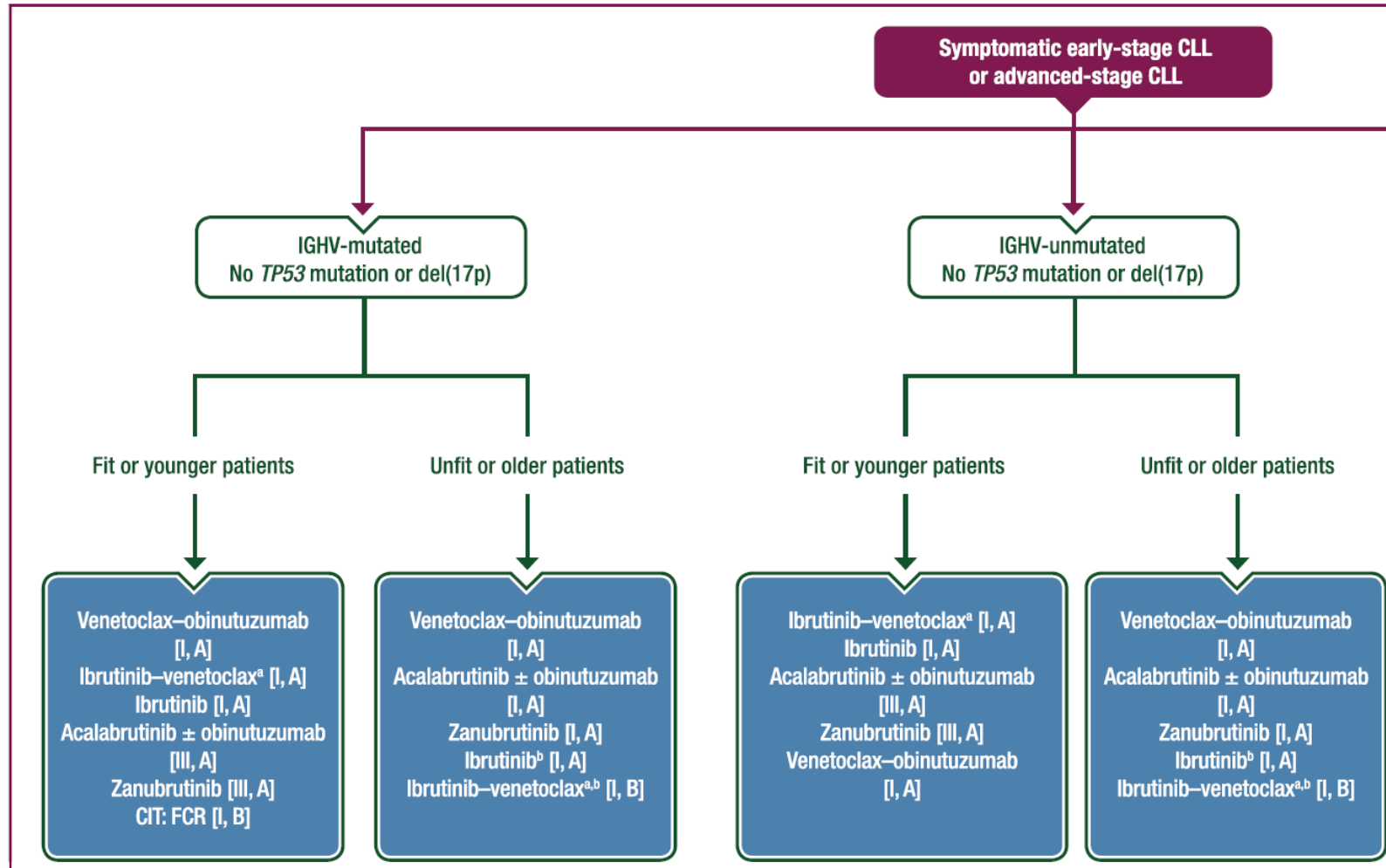
ESMO Clinical Practice Guideline interim update on new targeted therapies in the first line and at relapse of chronic lymphocytic leukaemia★

B. Eichhorst^{1†}, P. Ghia^{2,3†}, C. U. Niemann⁴, A. P. Kater⁵, M. Gregor⁶, M. Hallek^{1,7}, M. Jerkeman⁸ & C. Buske⁹, on behalf of the ESMO Guidelines Committee*



Eichhorst, P. Ghia, C.U. Niemann, A.P. Kater, M. Gregor, M. Hallek, M. Jerkeman, C. Buske, ESMO Clinical Practice Guideline interim update on new targeted therapies in the first line and at relapse of chronic lymphocytic leukaemia★, Annals of Oncology, 2024.

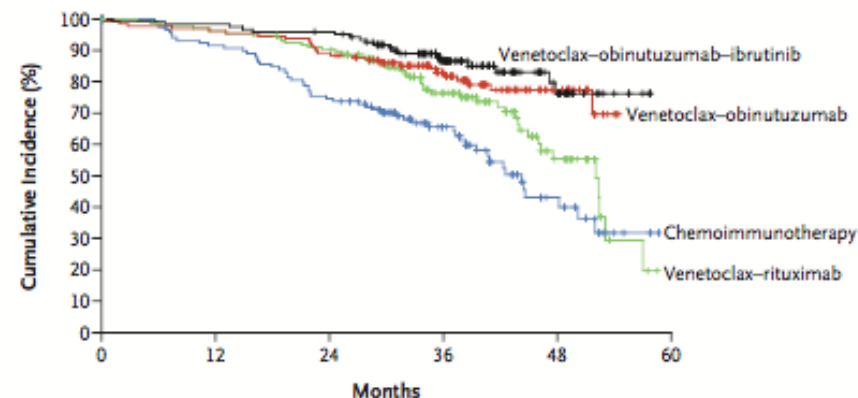
The role of IGHV Mutational Status



Eichhorst, P. Ghia, C.U. Niemann, A.P. Kater, M. Gregor, M. Hallek, M. Jerkeman, C. Buske, ESMO Clinical Practice Guideline interim update on new targeted therapies in the first line and at relapse of chronic lymphocytic leukaemia☆, Annals of Oncology, 2024.

CLL13
Fit/YOUNG
Median age 62

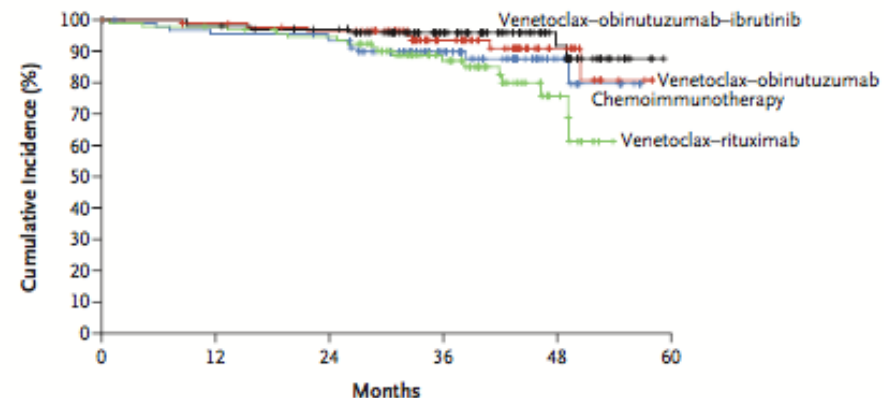
B Progression-free Survival, Patients with Unmutated IGHV



No. at Risk

Chemoimmunotherapy	131	108	88	48	14	0
Venetoclax-rituximab	134	128	119	67	20	0
Venetoclax-obinutuzumab	130	125	116	71	21	0
Venetoclax-obinutuzumab-ibrutinib	123	121	117	70	22	0

C Progression-free Survival, Patients with Mutated IGHV



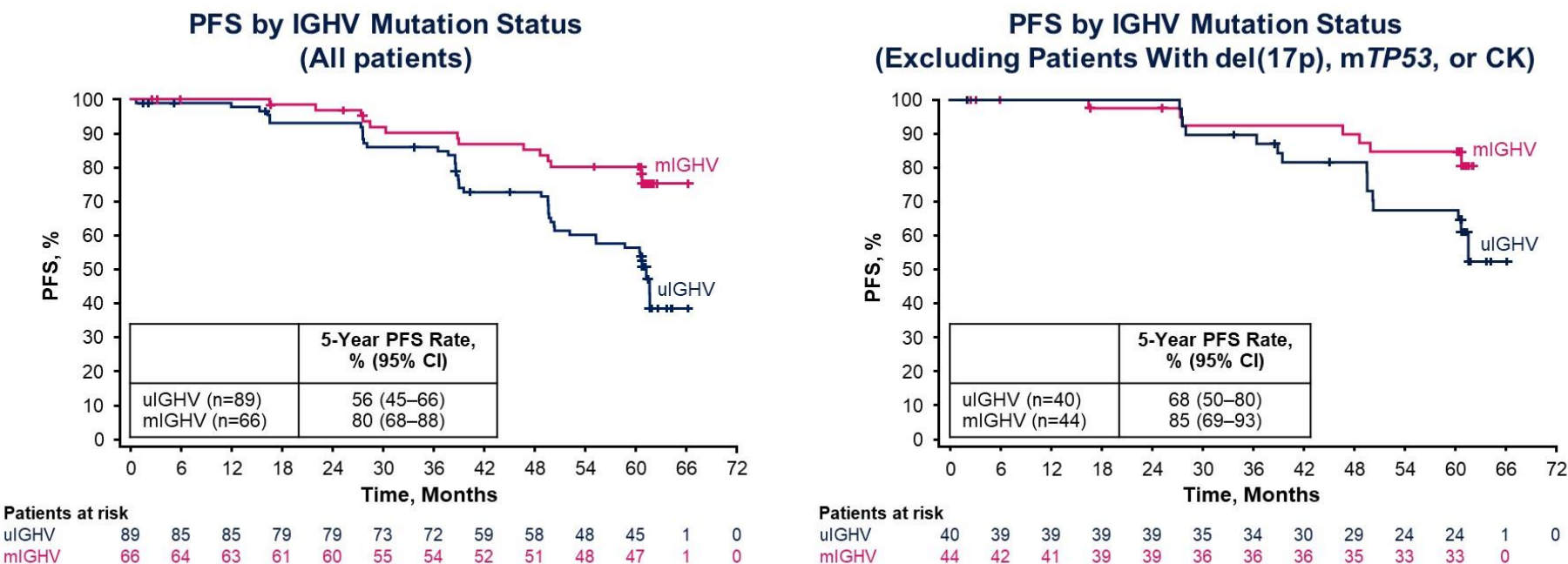
No. at Risk

Chemoimmunotherapy	95	86	83	50	14	0
Venetoclax-rituximab	95	91	86	49	12	0
Venetoclax-obinutuzumab	89	86	82	48	17	0
Venetoclax-obinutuzumab-ibrutinib	101	99	94	59	22	0

PFS 82,9%
36 months

PFS 93,6%
36 months

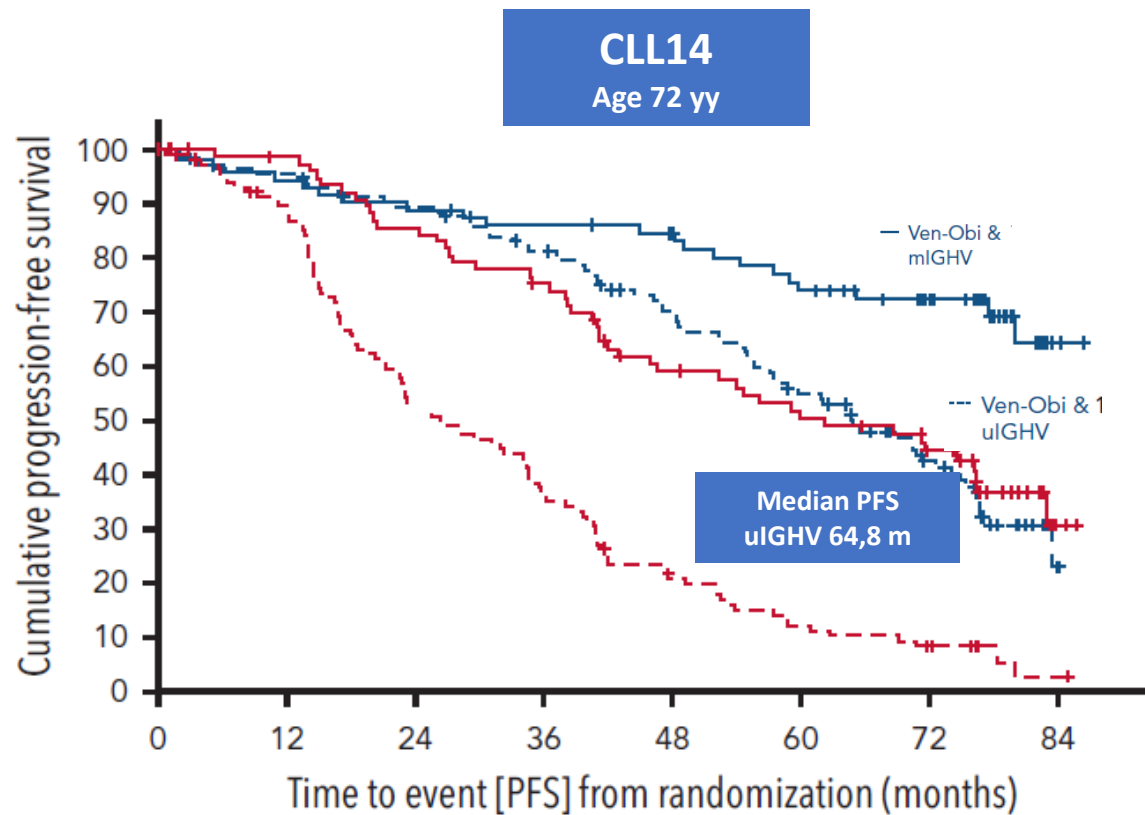
FD Cohort: 5-Year PFS Rates by IGHV Mutation Status (N=159)



- Presence of del(17p), mTP53, and/or CK had a substantial impact on PFS in patients with uIGHV and mIGHV

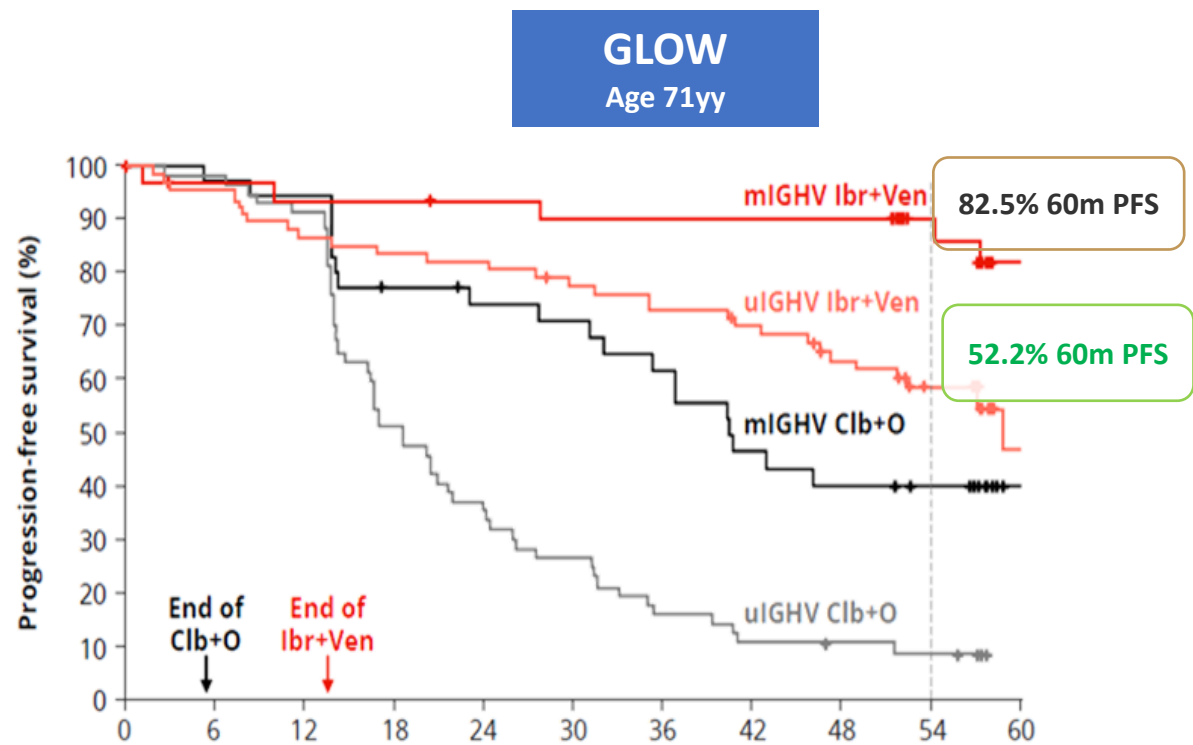
mIGHV, mutated IGHV; uIGHV, unmutated IGHV.

FIX DURATION THERAPY: Impact of IGHV Status On PFS



Median PFS with VO

mIGHV	NR
uIGHV	64.8 months



60m PFS rate with IV

mIGHV	82.5%
uIGHV	52.2%

Carsten Utoft Niemann, . *Blood* 2024; 144 (Supplement 1): 1871. doi: <https://doi.org/10.1182/blood-2024-203269>.

Al-Sawaf O, *Blood*. 2024 Oct 31;144(18):1924-1935. doi: 10.1182/blood.2024024631. PMID: 39082668; PMCID: PMC11551846.

AMPLIFY: randomized, multicenter, open-label, Ph 3 trial

TN CLL (N=867)

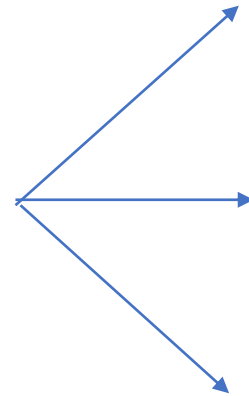
Key inclusion criteria

- Age ≥18 years
- Without del(17p) or TP53
- ECOG PS ≤2

Key exclusion criteria

- CIRS-Geriatric >6
- Significant cardiovascular disease

RANDOMIZE 1:1:1



**ACALABRUTNIB
VENETOCLAX**
(14 cycles)

**ACALABRUTINIB
VENETOCLAX
OBINUTUZUMAB**
(14 cycles)

FCR/BR
(6 cycles)

Primary endpoint:

IRC-assessed PFS (AV vs FCR/BR)

If primary endpoint met, secondary endpoints tested in fixed sequential hierarchy:

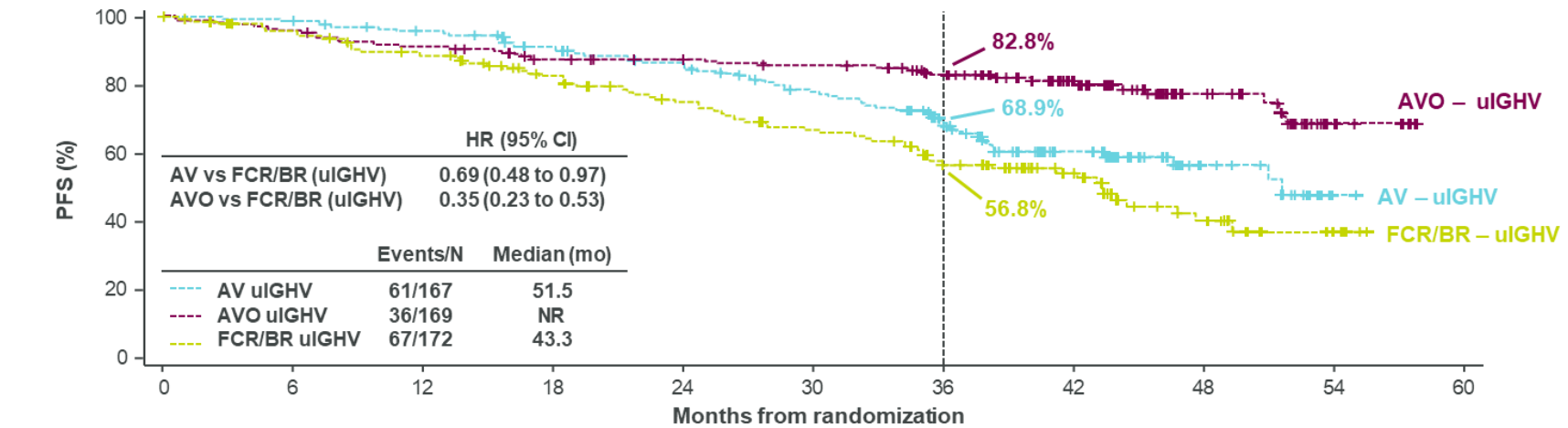
- 1) IRC-PFS (AVO vs FCR/BR)
- 2) uMRD (AV or AVO vs FCR/BR)
- 3) OS (AV or AVO vs FCR/BR)

Baseline Characteristics

Characteristic	AV (n=291)	AVO (n=286)	FCR/BR (n=290)
Age, median (range), yr	61 (31–84)	61 (29–81)	61 (26–86)
≤65 yr	212 (72.9)	210 (73.4)	213 (73.4)
>65 yr	79 (27.1)	76 (26.6)	77 (26.6)
Male sex	178 (61.2)	198 (69.2)	183 (63.1)
ECOG PS score			
0–1	262 (90.0)	272 (95.1)	262 (90.3)
2	28 (9.6)	14 (4.9)	26 (9.0)

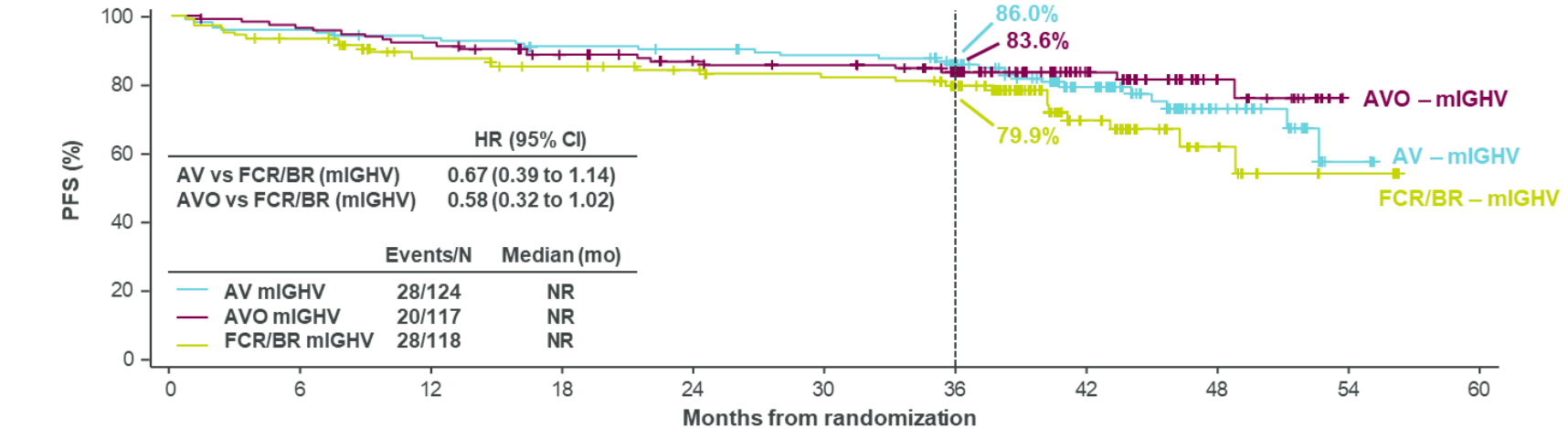
Brown JR ASH 2024

FIX DURATION THERAPY: Impact of IGHV Status On PFS



AMPLIFY
uIGHV

Age 61 yy
FIT

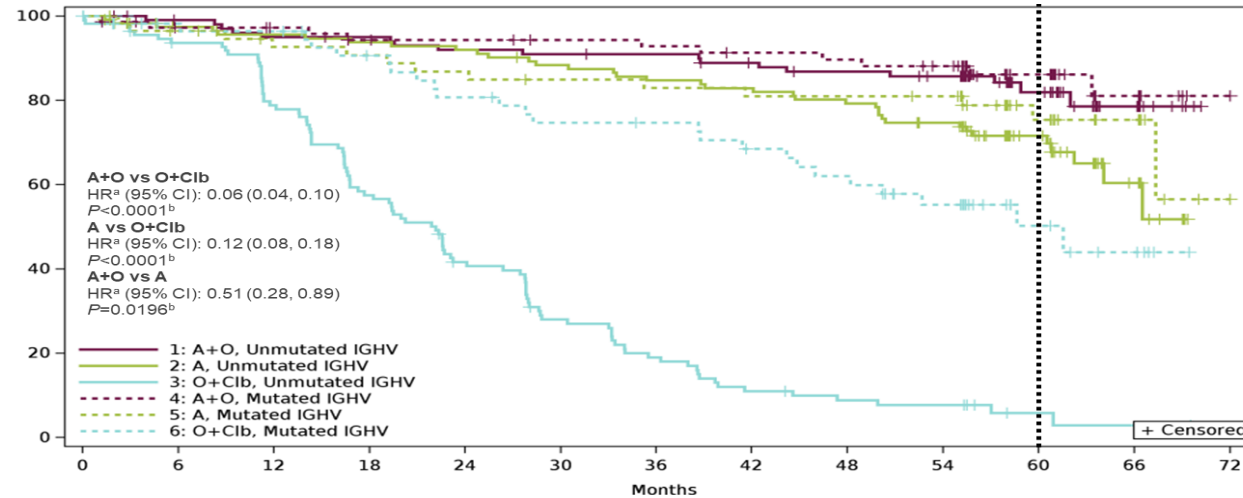


AMPLIFY
mIGHV

Brown JR, et al. *N Engl J Med.* 2025;392(8):748-762.

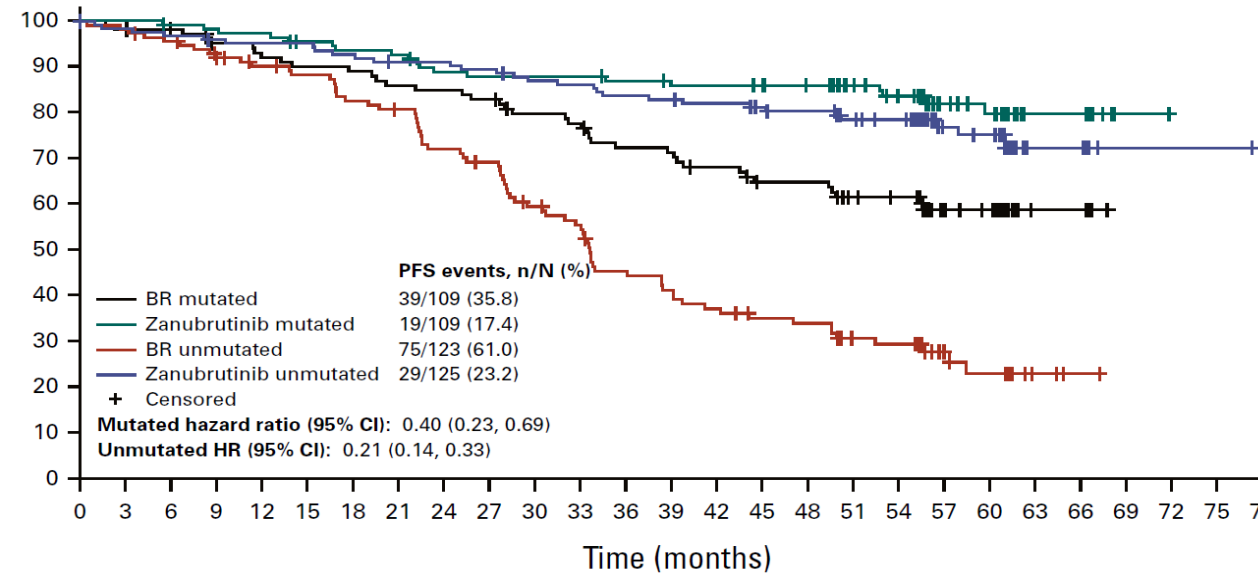
BTKi until progression: Impact of IGHV Status On PFS

Acalabrutinib
Unmut IGHV
ELEVATE-TN



5-Year
PFS 72%
Age 70

Zanubrutinib
Unmut IGHV
SEQUOIA (Arm A+B)

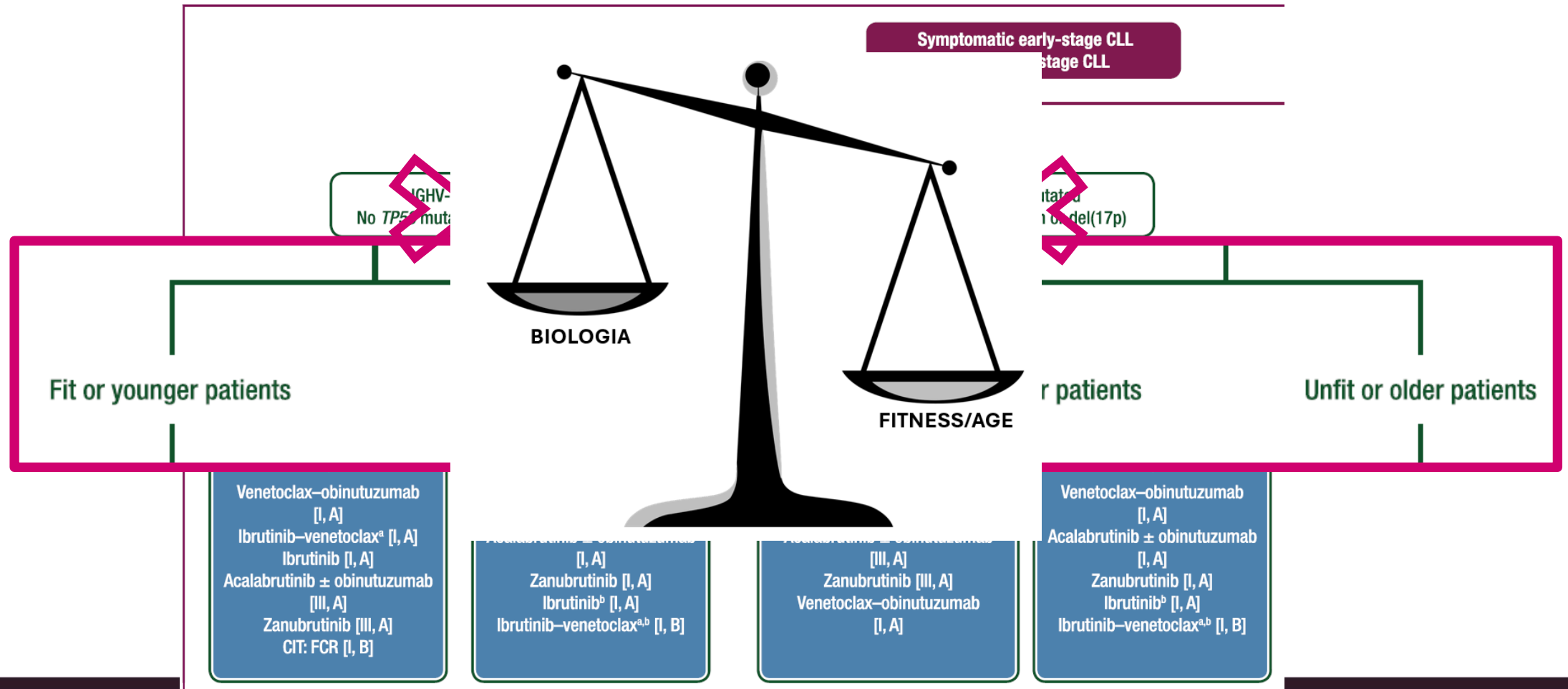


5-Year
PFS 76%
Age 71

Shadman M. et al., J Clin Oncol. 2025 Mar;43(7):780-787. doi: 10.1200/JCO-24-02265. Epub 2024 Dec 8. PMID: 39647999; PMCID: PMC11855994.

in the first line and at relapse of chronic lymphocytic leukaemia

B. Eichhorst^{1†}, P. Ghia^{2,3†}, C. U. Niemann⁴, A. P. Kater⁵, M. Gregor⁶, M. Hallek^{1,7}, M. Jerkeman⁸ & C. Buske⁹, on behalf of the ESMO Guidelines Committee*





CLL17

Abstract Title : Fixed-duration versus continuous targeted treatment for previously untreated chronic lymphocytic leukemia: Results from the randomized CLL17 trial

Three-yr PFS was 81.1% in the VO arm compared to 81.0% in the I arm (HR 0.87, type-I-error adjusted CI [98.3%] 0.54-1.41) and 79.4% in the VI arm (compared to I arm: HR 0.84, type-I-error adjusted CI [98.0%] 0.53-1.32), respectively, with the upper limit of each adjusted CI below the pre-defined non-inferiority margin, providing early evidence of non-inferiority.

At final staging (C18D1), the ORR was 84.2% in the VO arm, 88.5% in the VI arm, and 86.0% in the I arm, with a CR rate of 51.5%, 46.2%, and 8.3%, respectively; the uMRD ($<10^{-4}$) rate in ITT population in peripheral blood was 73.3% (62.0% in bone marrow) in the VO arm, 47.2% (40.0% in bone marrow) in the VI arm and 0% (0% in bone marrow) in the I arm.

At 3 yrs, the OS rate was 91.5% in the VO arm, compared to 95.7% in the I arm (HR 1.67, 95% CI 0.86-3.28) and 96.0% in the VI arm (compared to I: HR 0.96, 95%CI 0.45-2.05), respectively.

For pts with unmutated IGHV, 3-yr PFS in the VO arm was 75.8% (87.6% for mutated IGHV) compared to 79.7% (83.5%) in the I arm (HR 0.98, 95% CI 0.61-1.59), and 78.9% (80.0%) in the VI arm (compared to I: HR 0.81, 95% CI 0.49-1.32). For pts with del(17p)/TP53mut, 3-yr PFS in the VO arm was 62.0% (82.7% for pts without del(17p)/TP53mut) compared to 79.4% (81.0%) in the I arm (HR 1.20, 95% CI 0.40-3.59), and 69.0% (80.1%) in the VI arm (compared to I: HR 0.70, 95% CI 0.22-2.16).

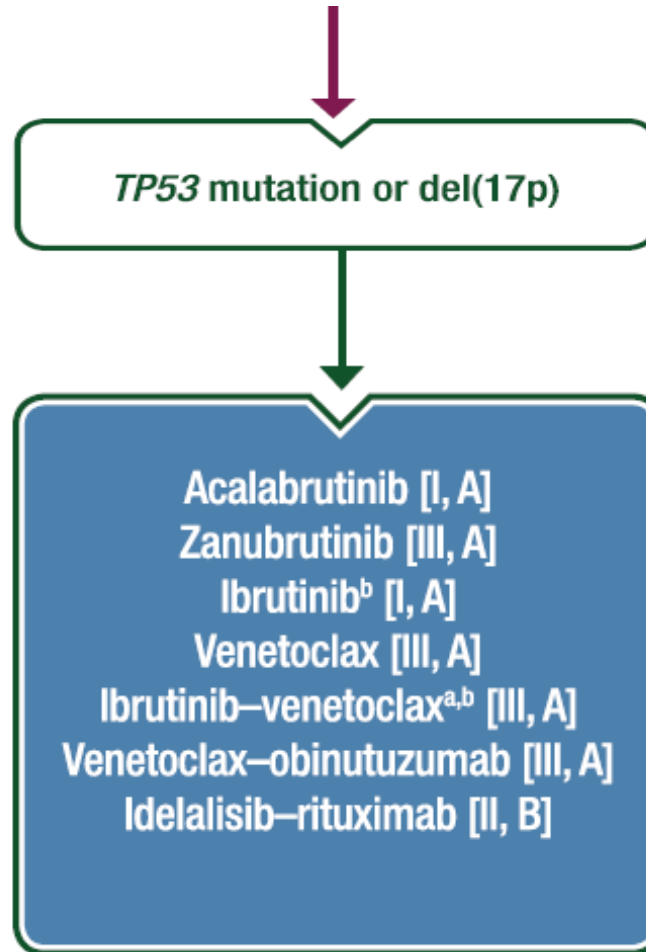
Median age 66 aa (34-90), CIRS 0-18

CLL17	ORR C18 D1	CR	uMRD BM	PFS 3y F-UP	PFS uIGHV 3y F-UP	PFS mIGHV 3y F-UP	PFS del17p/TP53 3y F-UP
VO	84,2%	51,5%	62%	81,1%	75,8%	87,6%	62%
VI	88,5%	46,2%	40%	79,4%	78,9%	80%	69%
I	86%	8,3%	0%	81%	79.7%	83,5%	79,4%

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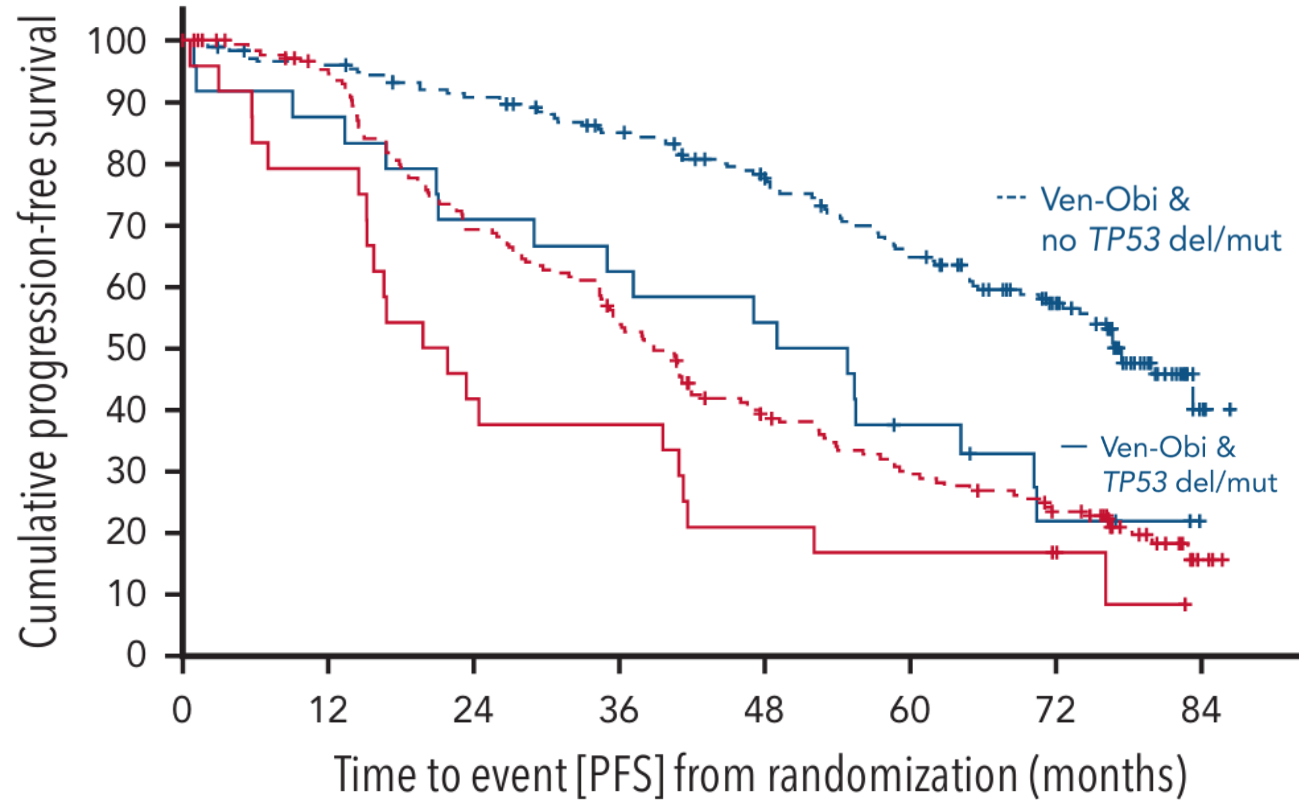
The role of TP53 or Del(17p)



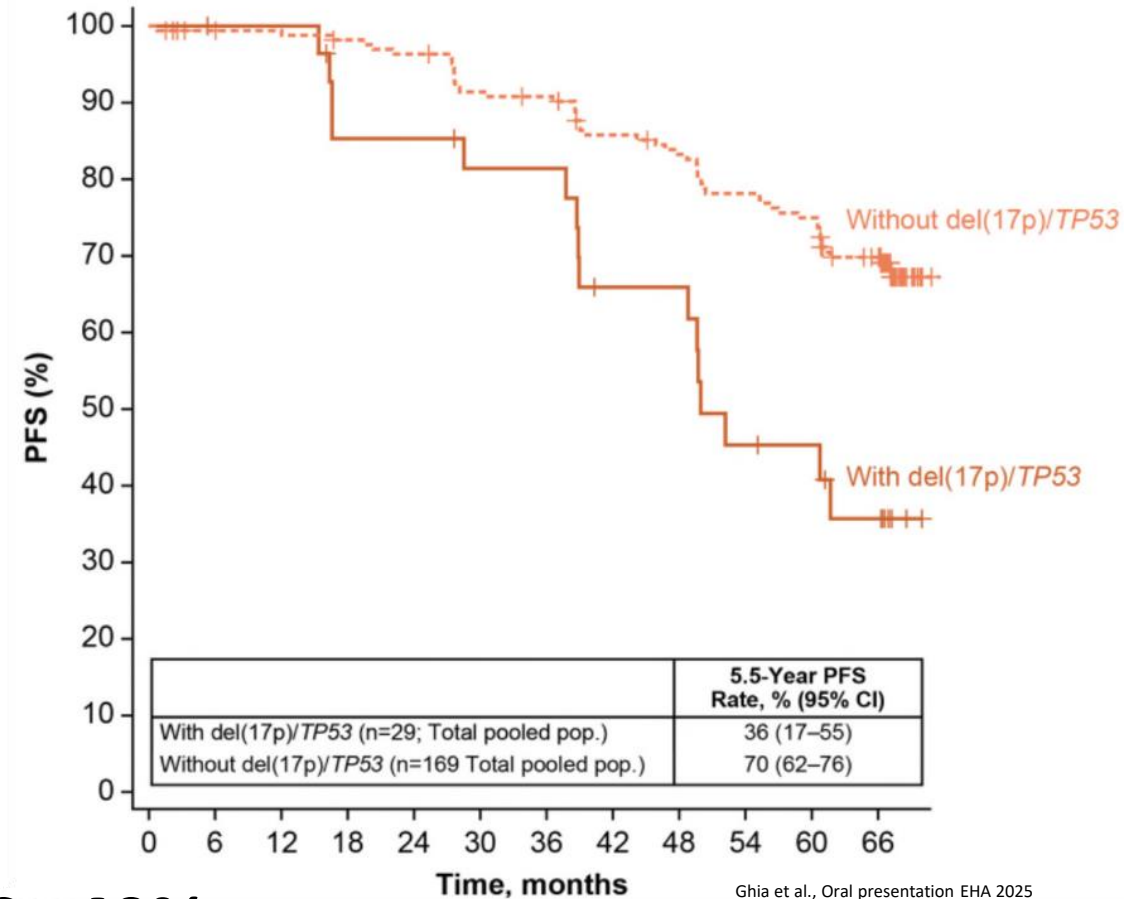
Eichhorst, P. Ghia, C.U. Niemann, A.P. Kater, M. Gregor, M. Hallek, M. Jerkeman, C. Buske, ESMO Clinical Practice Guideline interim update on new targeted therapies in the first line and at relapse of chronic lymphocytic leukaemia★, Annals of Oncology, 2024.

Fixed-Duration Therapy: efficacy outcomes in TP53 del/mut

Venetoclax + Obinutuzumab CLL14



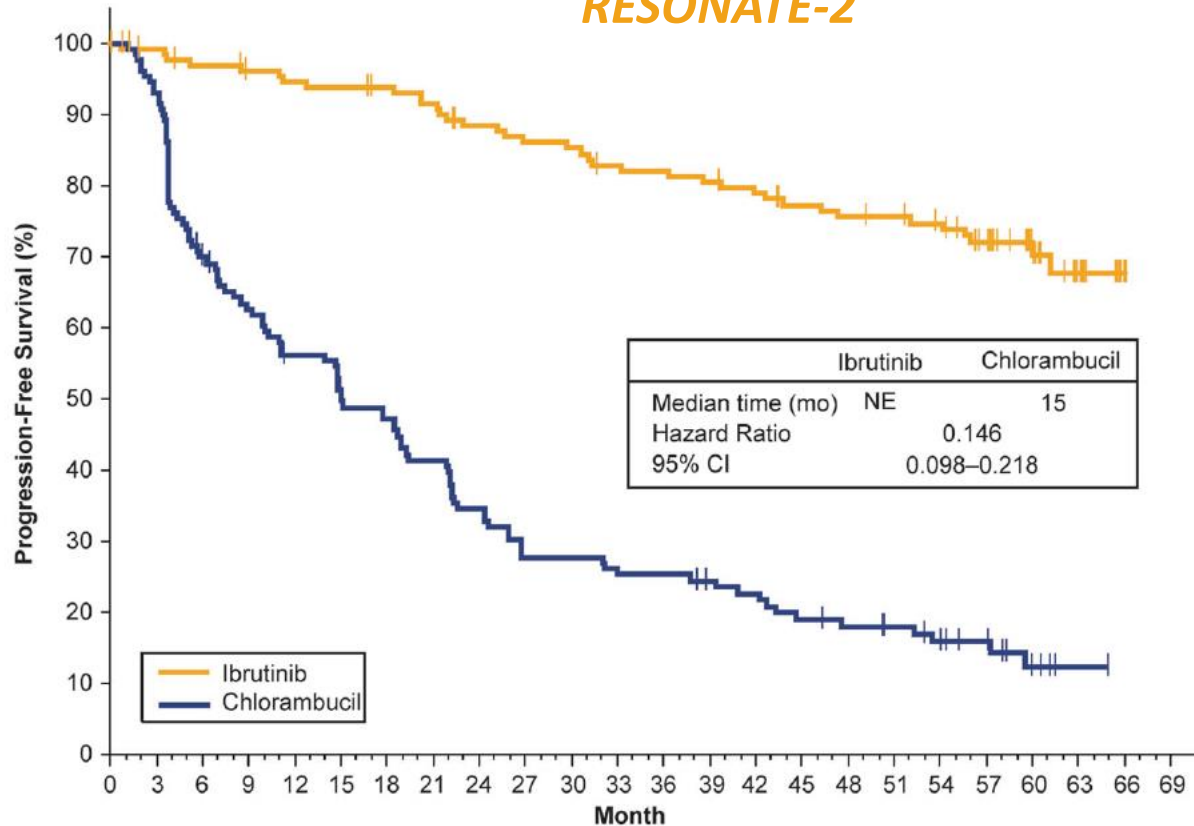
Ibrutinib + Venetoclax CAPTIVATE



5-Year PFS ~40%

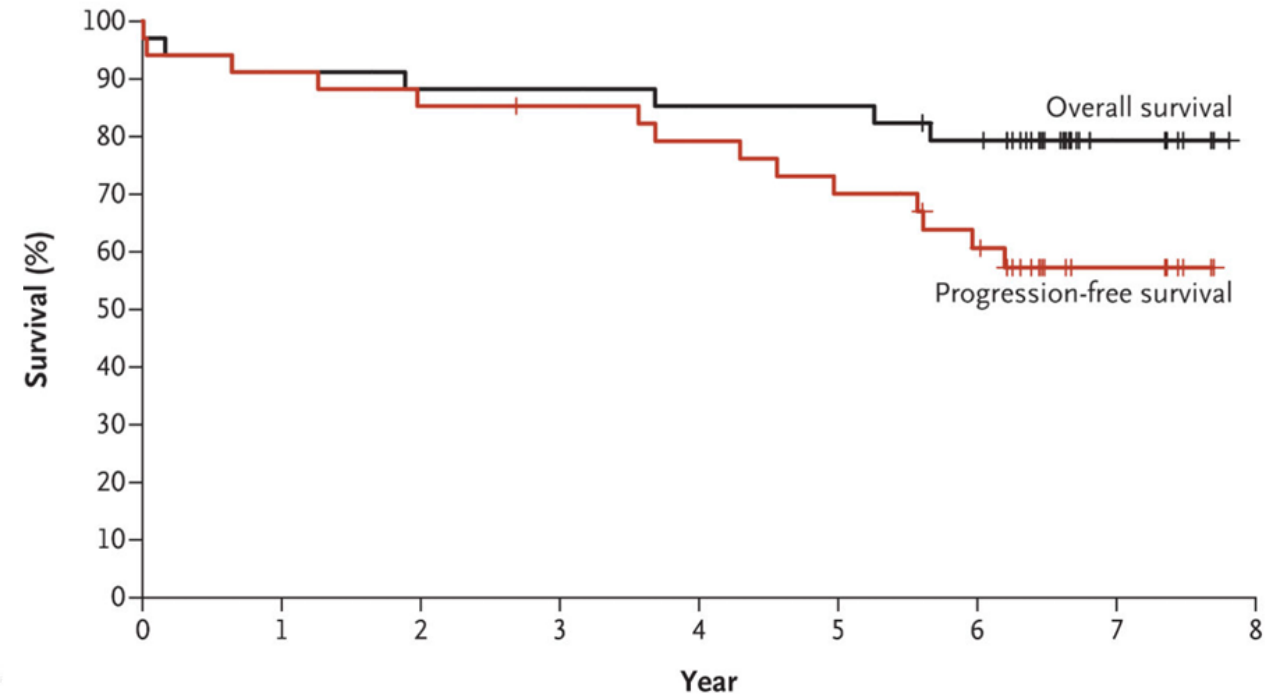
BTK Inhibitors until progression: efficacy outcomes in TP53 del/mut

Ibrutinib without TP53/Del17p RESONATE-2



5-Year PFS 70%

Ibrutinib with TP53 del/mut I. E. Ahn et al - N Engl J Med (2020)

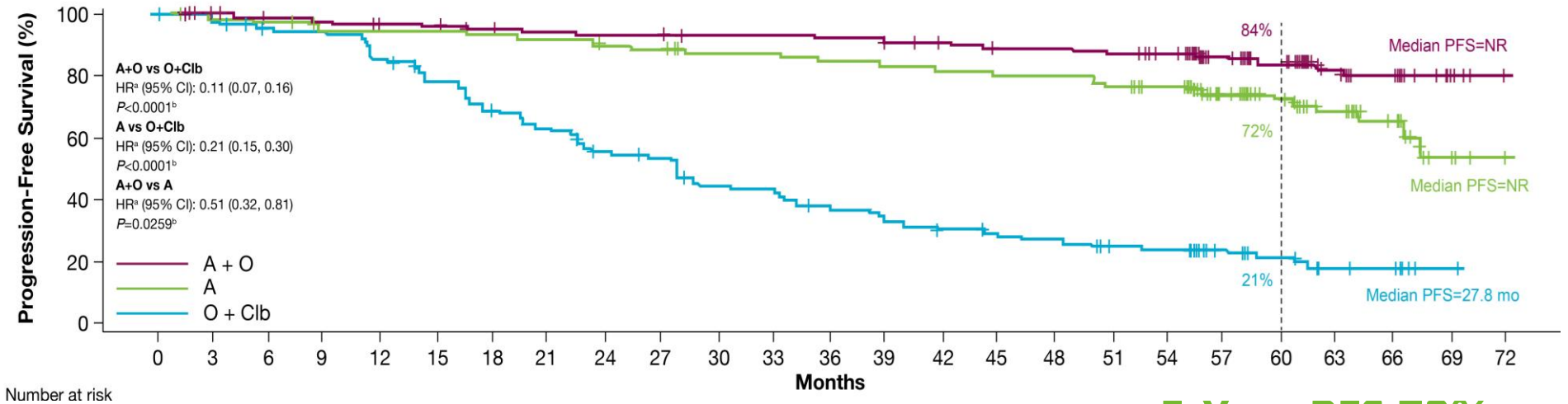


5-Year PFS 70%

Burger JA. Leukemia. 2020 Mar;34(3):787-798. doi: 10.1038/s41375-019-0602-x. Epub 2019 Oct 18. PMID: 31628428; PMCID: PMC7214263. Ahn IE, Tian X, Wiestner A. N Engl J Med. 2020 Jul 30;383(5):498-500. doi: 10.1056/NEJMc2005943. PMID: 32726539; P

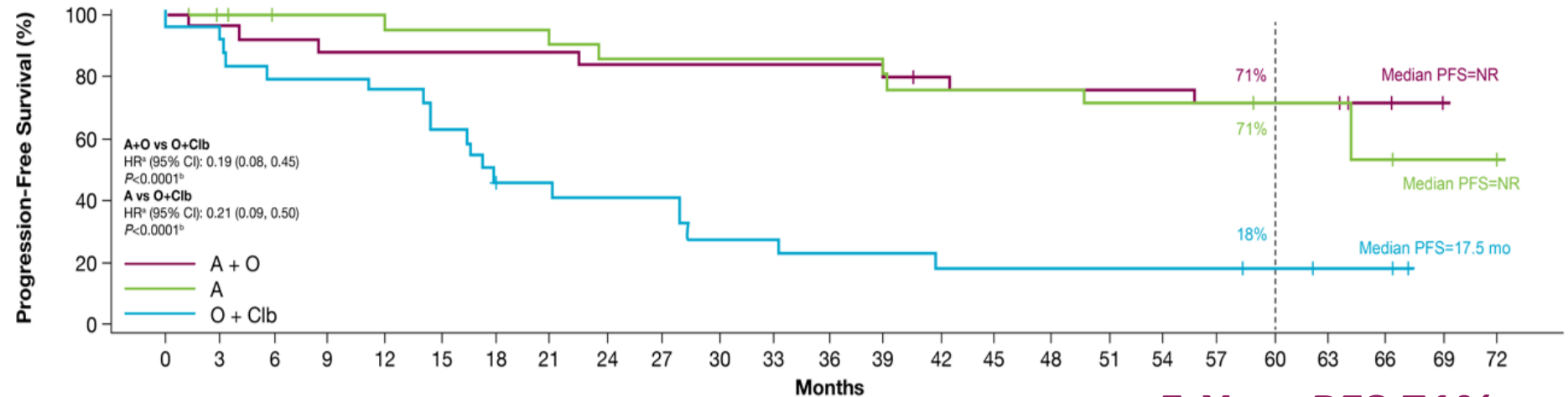
BTK Inhibitors until progression: efficacy outcomes in TP53 del/mut

Acalabrutinib ITT ELEVATE-TN



5-Year PFS 72%

Acalabrutinib TP53 del/mut ELEVATE-TN

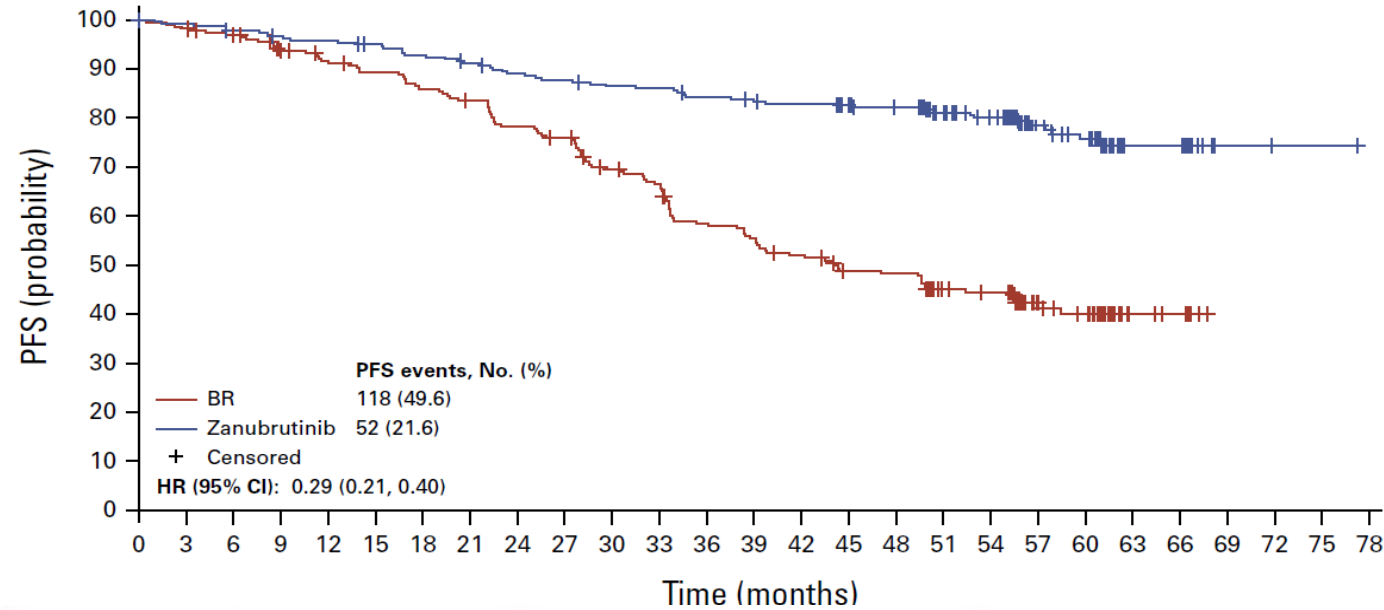


5-Year PFS 71%

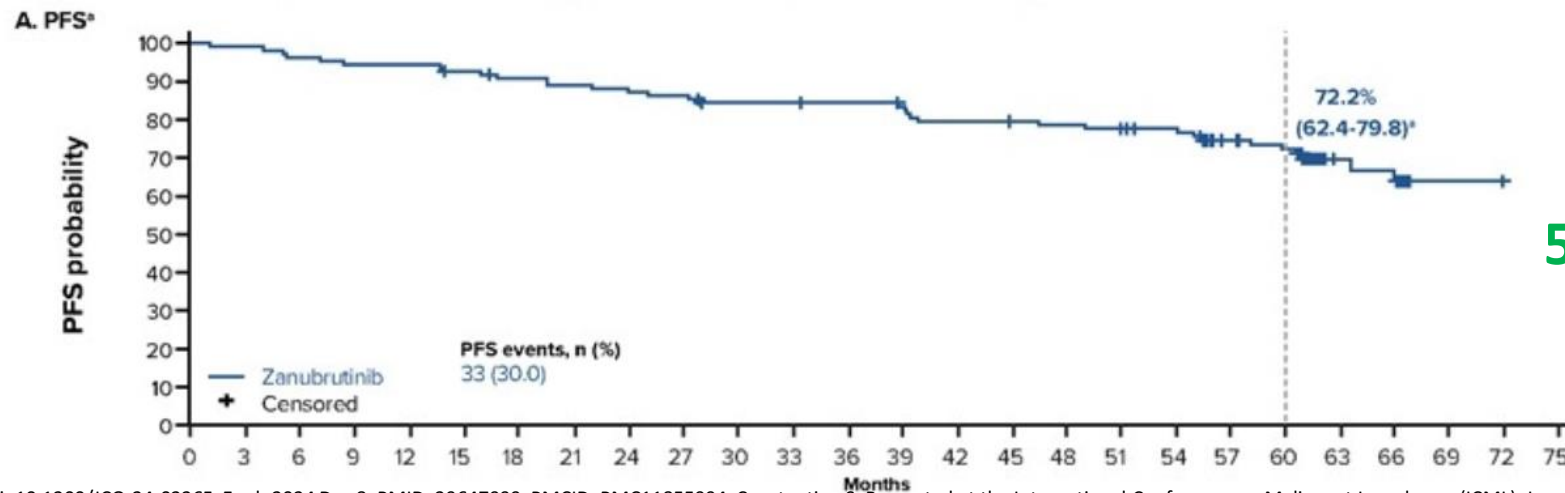
EHA Library. P. Sharman J. 06/10/22; 357528; P666

BTK Inhibitors until progression: efficacy outcomes in TP53 del/mut

Zanubrutinib ITT
SEQUOIA (Arm A+B)



Zanubrutinib
del17/TP53mut
SEQUOIA (Arm C)



Shadman M. et al., J Clin Oncol. 2025 Mar;43(7):780-787. doi: 10.1200/JCO-24-02265. Epub 2024 Dec 8. PMID: 39647999; PMCID: PMC11855994. Constantine S. Presented at the International Conference on Malignant Lymphoma (ICML); June 17-21, 2025; Lugano, Switzerland Data originally presented at the 2025 ASCO Annual Meeting; May 30-June 3, 2025; Chicago, IL, USA, Abstract #7011

Il suono **DELL' INNOVAZIONE**

Bologna Palazzo De' Toschi
27-28 novembre 2025

BTKi phase III trials: Events of Clinical Interest

@5Y Follow Up

	IBRUTINIB RESONATE-2 ¹		ACALABRUTINIB ELEVATE-TN ²		ZANUBRUTINIB SEQUOIA ³	
	Any Grade	Grade ≥3	Any Grade	Grade ≥3	Any Grade	Grade ≥3
Atrial fibrillation	16%	5%	7.3%	1.1%	7.1%	1.4%
Bleeding	NA	11%	43.6%	3.4%	52.1%	7.5%
Hypertension	26%	9%	8.9%	3.9%	22.9%	12.1%

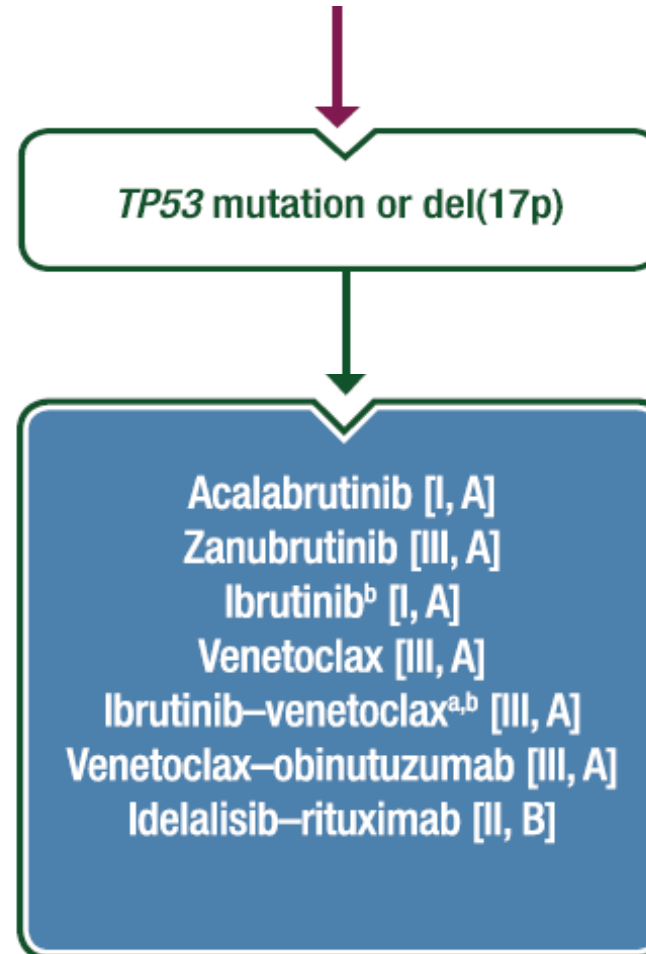
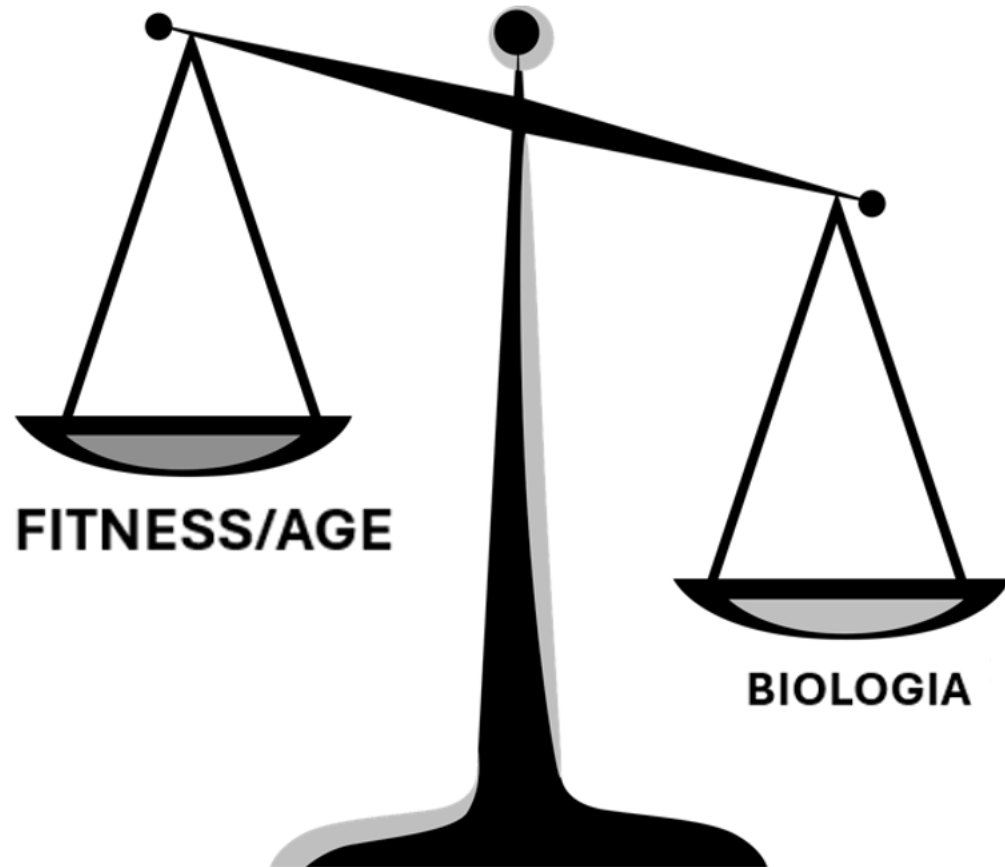
1.Burger JA et al. Leukemia, 2020
2. Sharman JP et al. Poster Presented at: ASCO 2022.
3. Shadman M et al. Journal of Clinical Oncology, 2024
NA: not available

Median age 66 aa (34-90), CIRS 0-18

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Eichhorst, P. Ghia, C.U. Niemann, A.P. Kater, M. Gregor, M. Hallek, M. Jerkeman, C. Buske, ESMO Clinical Practice Guideline interim update on new targeted therapies in the first line and at relapse of chronic lymphocytic leukaemia★, Annals of Oncology, 2024.