Highlights nella Leucemia Acuta Linfoblastica

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No conflicts to declare

SAPIENZA
UNIVERSITÀ DI ROMA

RENDE (CS)
23-24 MAGGIO 2025

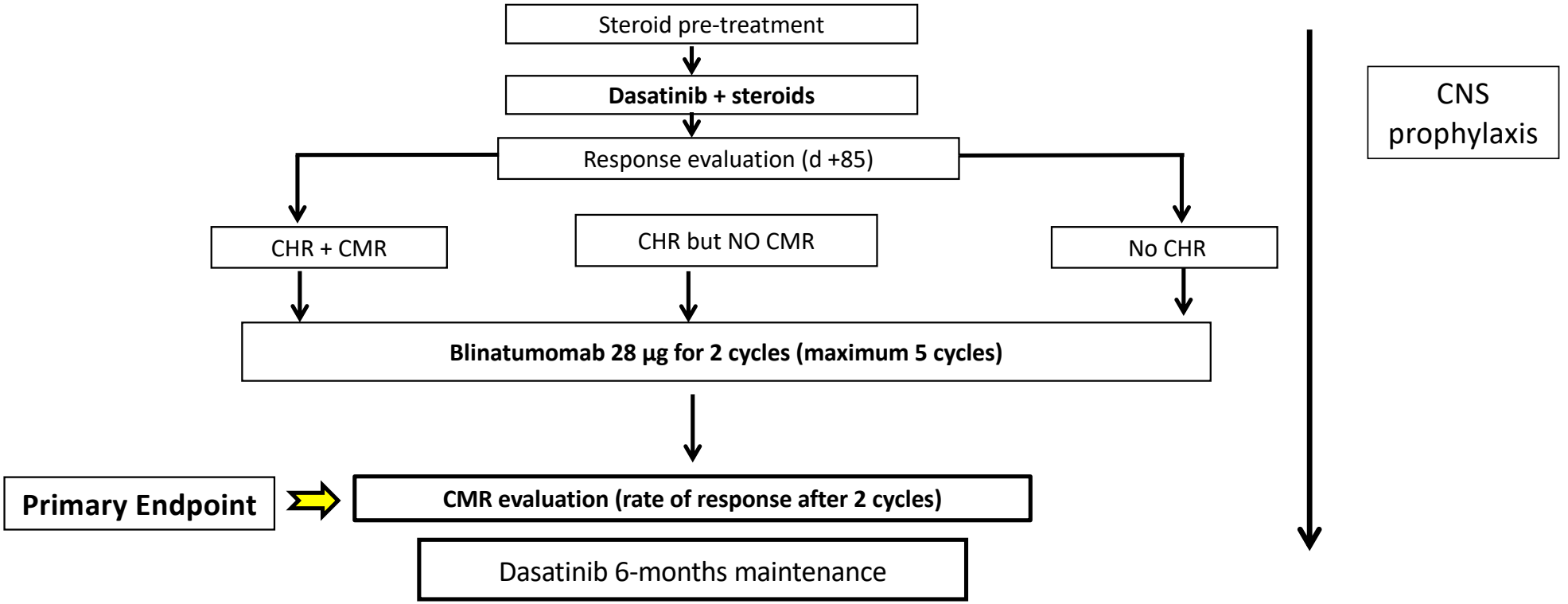
Highlights in
EMATOLOGIA

Highlights on Acute Lymphoblastic Leukemia

- **Ph+ B-ALL**
- Ph- B-ALL
- New strategies

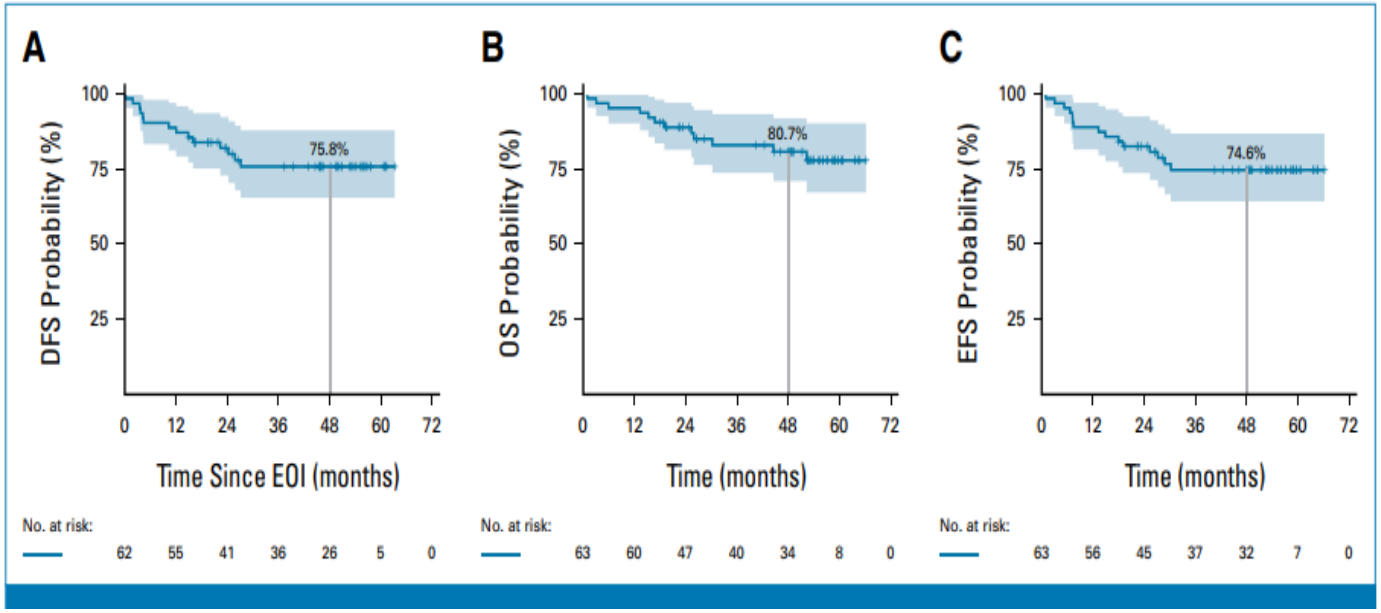
D-ALBA: treatment scheme

Designed for newly diagnosed Ph+ ALL, no upper age limit; sample size: 63



Foà et al, NEJM 2020;

D-ALBA: results

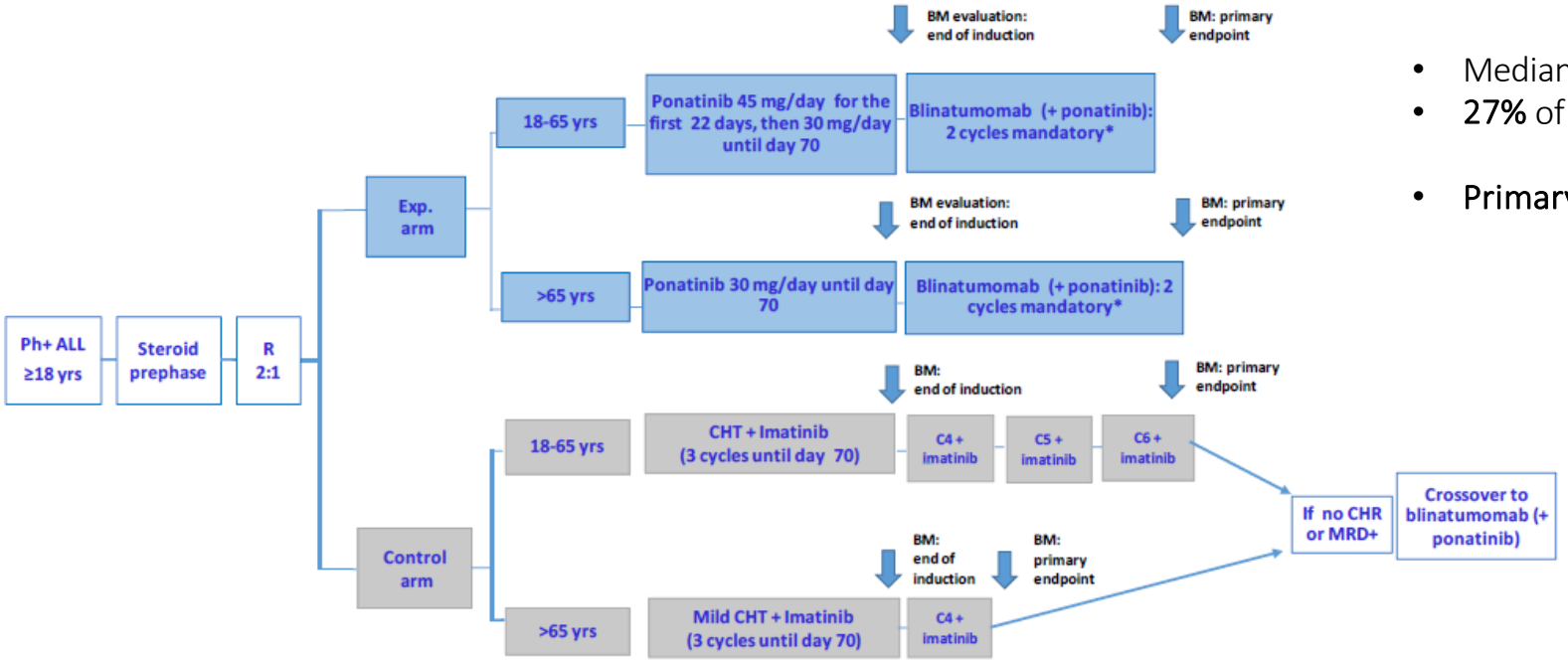


- Median age **54** years (**24-82**);
- Median follow-up of **53** months;
- DFS, OS, and EFS were 75.8%, 80.7% and 74.6%;
- Worse DFS for ***IKZF1^{plus}*** patients;
- DFS is 100% in molecular responders at the EOI → **prognostic role of early molecular response in a chemotherapy-free setting**.
- **9 Relapses** (4 CNS-only);*
- **6** patients requiring a TKI switch: **Pleural effusion** was the most common adverse event.

Foà R et al. J Clin Oncol. 2024

GIMEMA LAL2820

Newly Diagnosed Adult Philadelphia Chromosome-Positive Acute Lymphoblastic Leukemia (Ph+ ALL). Sequential Treatment with Ponatinib and the Bispecific Monoclonal Antibody Blinatumomab vs Chemotherapy and Imatinib



- Median age **57 yrs (20-87);**
- **27%** of patients being **>65 years**
- Primary enpoint: June 2025

Chiaretti et al, abs 835, ASH 2024

GIMEMA ALL2820. Experimental arm: hematologic and molecular responses

End of induction (D+70)	Experimental arm (N=158)
CHR	151 **(95.6%)**
Deaths	4 **(2.5%)***
Refractory	-
Off treatment	3 **(1.9%)**

*Median age: 67 yrs

Relapses	Experimental arm (N=151)
Overall	7 (4.6%)
In trial*	4 (2.6%)
Off-treatment	2 (1.3%)

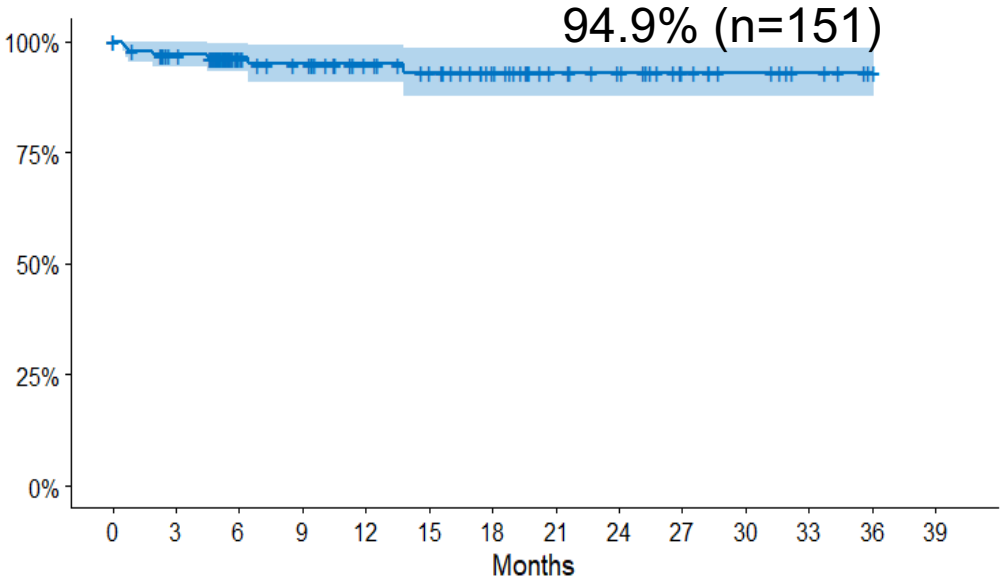
*1 relapse was due to a Ph- clone

Experimental arm N=159	No molecular responses (%)	CMR	PNQ	Overall molecular responses (%)
End induction (d +70)	76/148 (51)	46/148	26/148	72/148 **(49)**
After 2 blina cycles	32/134 (24)	71/134	31/134	102/134 **(76)**

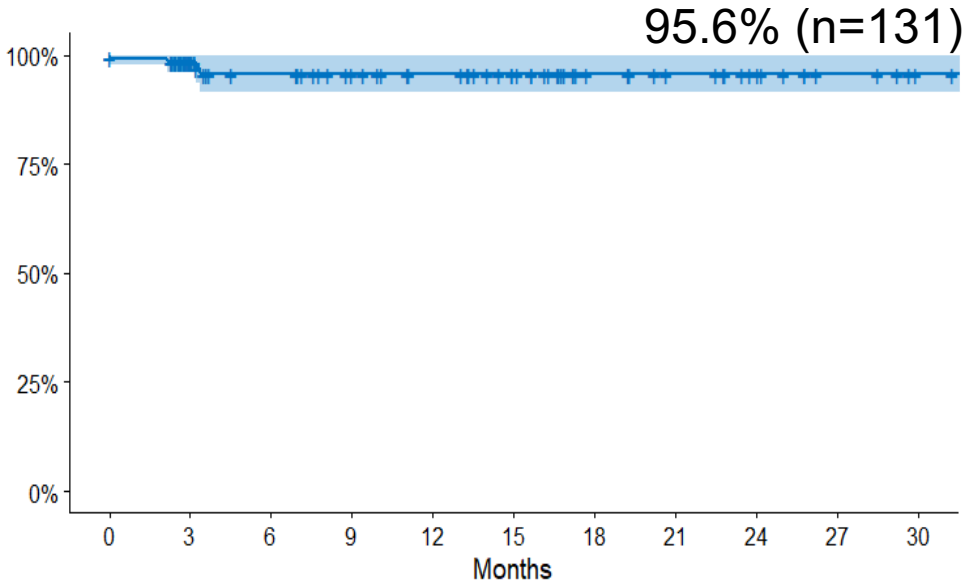
Ph-positive B-ALL

GIMEMA ALL2820. Experimental arm: hematologic and molecular responses

OS



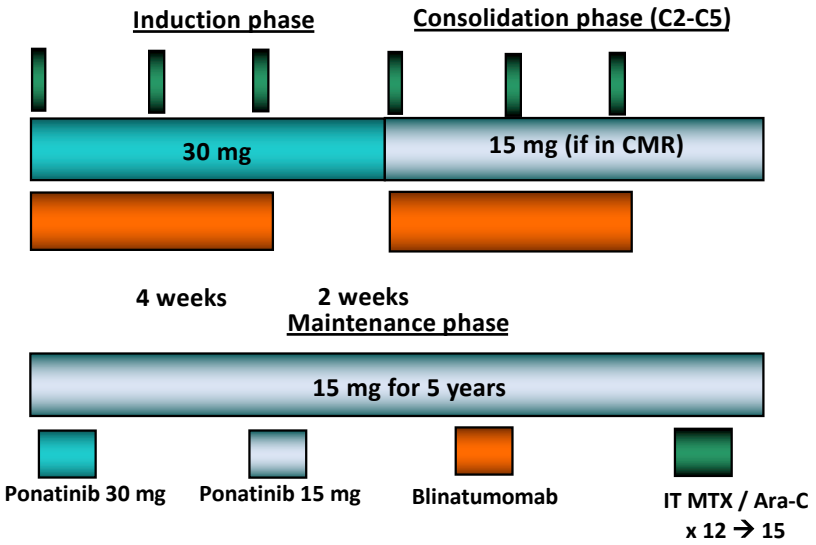
DFS



Median follow-up: 8.5 months (0.1 - 36.1)

Chiaretti et al, abs 835, ASH 2024

Ponatinib + Blinatumomab in Ph+ ALL: Regimen



Response, n/N (%)	N = 76
CR/CRi*	52/53 (98)
CR	51/53 (96)
CRi	1/53 (2)
Early death	1/53 (2)
MMR**	64/66 (97)
CMR**	57/69 (83)
After 1 cycle	41/69 (59)
NGS MRD negative	55/57 (96)
After 1 cycle	17/36 (47)

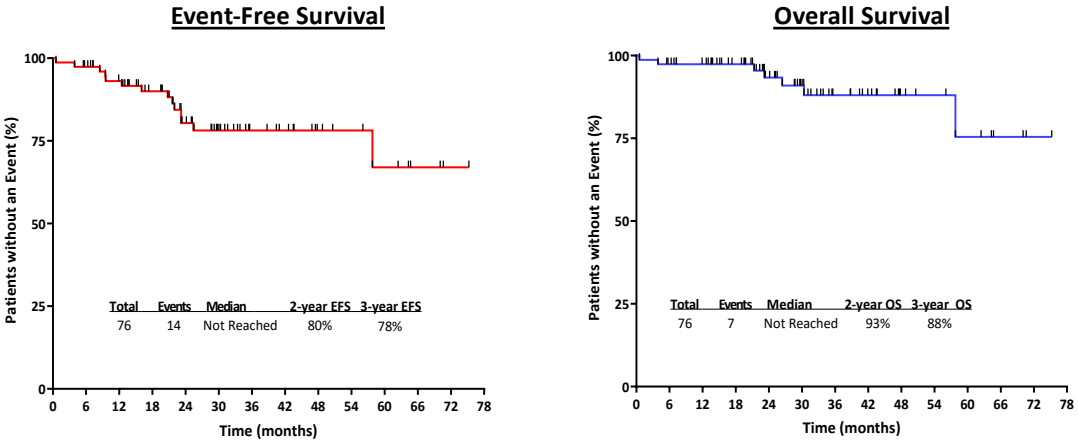
8/8 of tested pts not achieving CMR were NGS MRD negative

* 23 pts in CR at start

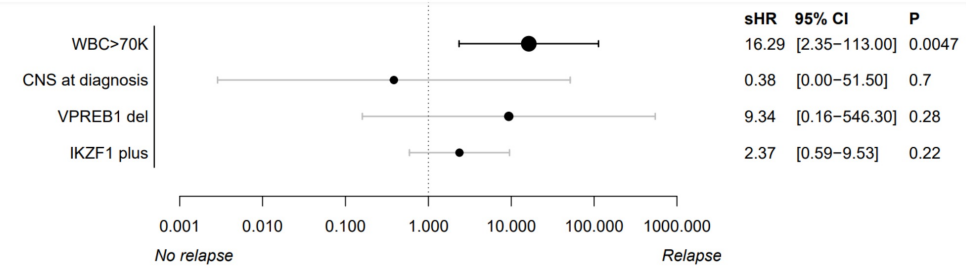
** 10 pts were in MMR, 7 were in CMR, and 2 were NGS MRD negative at start

Short et al, abs 837, ASH 2024

Ponatinib + Blinatumomab in Ph+ ALL



Median follow-up: 29 months (range, 5-75 months)



10 relapses= 5 were CNS-only*, 1 extramedullary and 4 hematological;

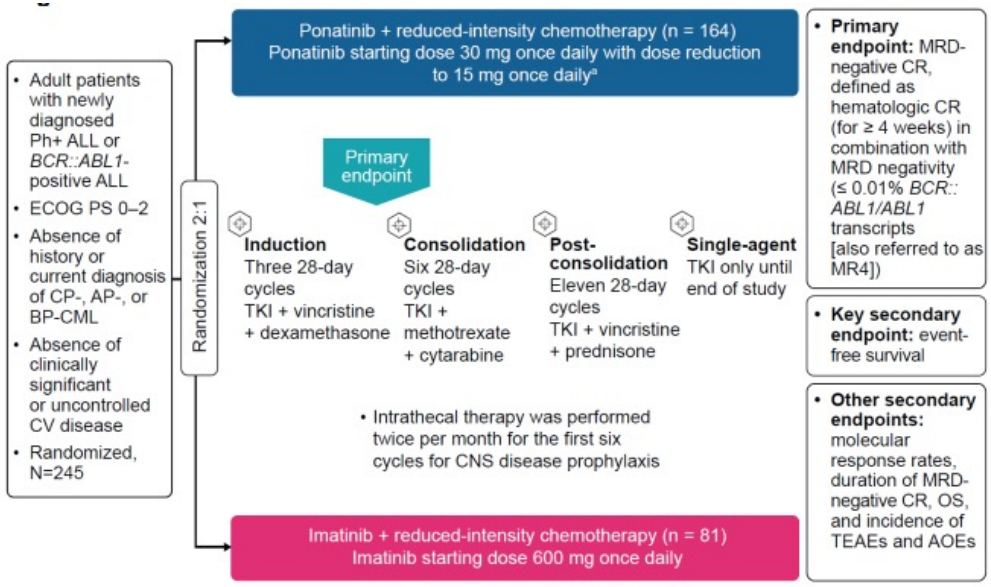
Short et al, abs 837, ASH 2024; Short et al, J Hematol Oncol. 2025

Ph-positive B-ALL

Ponatinib vs Imatinib in Frontline Philadelphia Chromosome–Positive Acute Lymphoblastic Leukemia

- **245 pts**, random 2:1 ponatinib + LD CHT (n=154) : imatinib + LD CHT (n=78);
- Median age **54 yrs (19-82); 37.1% >60 years**;

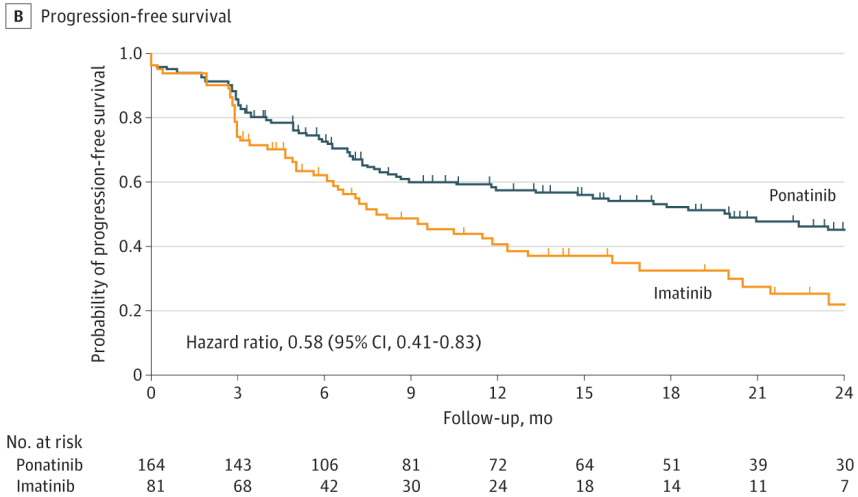
- Median follow-up= **20.1 months** (17.8-23.1) → 41.5% pts in Ponatinib vs 12.3% in Imatinib group continued treatment;
- Discontinuation for: SCT- Pona-group 30.5% vs Ima-group 37%; lack of efficacy- Pona-group **7.3%** vs Ima-group **25.9%;**
- **Primary endpoint: EOI MRD- CR → Pona-group 43**% vs Ima-group 22.1% (**p=0.002**)*;



*4-week durable complete remission (excluding incomplete remission) and MRD negativity as determined by the central laboratory at the end of induction

Jabbour, E., et al. JAMA 2024.

Ponatinib vs Imatinib in Frontline Philadelphia Chromosome–Positive Acute Lymphoblastic Leukemia



- CMR rate after Cycle 9= 62.1% vs 44.9%
- Trend toward better PFS Pona group= 20.0 months vs Ima-group= 7.9 months;
- SCT 34.1% Pona group vs 48.1% Ima group (p= .03);

Table 3. Adverse Events

	No. (%)			
Adverse events	**Ponatinib (n = 163)**		**Imatinib (n = 81)**	
Treatment-emergent adverse events[a]				
Any	162 (99.4)		80 (98.8)	
Serious	97 (59.5)		45 (55.6)	
Grade 3-4	139 (85.3)		71 (87.7)	
Grade 5	8 (4.9)		4 (4.9)	
Treatment-related adverse events[a]				
Any	141 (86.5)		67 (82.7)	
Serious	34 (20.9)		16 (19.8)	
Grade 3-4	107 (65.6)		48 (59.3)	
Grade 5	0		1 (1.2)	
Adverse events of special interest	**Any grade**	**Grade 3-4**	**Any grade**	**Grade 3-4**
Adjudicated arterial occlusive events[b]				
Any	4 (2.5)	2 (1.2)	1 (1.2)	0
Cardiovascular events	2 (1.2)	2 (1.2)	0	0
Cerebrovascular events	1 (0.6)	0	1 (1.2)	0
Peripheral vascular events	1 (0.6)	0	0	0
Adjudicated venous thromboembolic events[b]				
Any	19 (11.7)	6 (3.7)	10 (12.3)	1 (1.2)
Peripherally inserted central catheter line or central venous catheter related	8 (4.9)	NA	6 (7.4)	NA
Deep vein thrombosis	13 (8.0)	5 (3.1)	9 (11.1)	0
Superficial vein thrombosis	5 (3.1)	0	0	0
Pulmonary embolism	2 (1.2)	1 (0.6)	1 (1.2)	1 (1.2)

Abbreviation: NA, not available.

[a] Higher grades indicate more serious adverse events. The sum of values for the serious and grade 3, 4, or 5 adverse event categories does not sum to the value in the "any" category because individual patients could have had events in multiple categories.

[b] Arterial occlusive events and venous thromboembolic events were reviewed based on an adjudication charter written before the start of the study by an independent cardiovascular end point adjudication committee comprising experts with experience and training appropriate for reviews of the cardiovascular end points. The committee adjudicated all arterial occlusive and venous thromboembolic events reported by the study sites (ie, initial diagnoses, laboratory values, results of procedures, and hospital discharge summaries).

59% had at least 1 cv comorbidity and **29.5%** had 2 or more comorbidities at baseline;

Jabbour, E., et al. JAMA 2024.

TKI Stop

	CAMPUS ALL[1]	MDACC[2]
N pts	18	14
Induction therapy	Ima (10), **Dasa (4), Pona (4)**	Ima (2), **Dasa (6), Pona (6)**
Median TKI exposure, months (range)	84.5 (4-205).	60 (31-125)
Main reason for discontinuation	Toxicity (n=12); Pt decision (n=6)	Toxicity (100%)
Relapses (%)	5 (28%)	3 (21%), 1 hematological
Median time to relapse, months	4	6.4

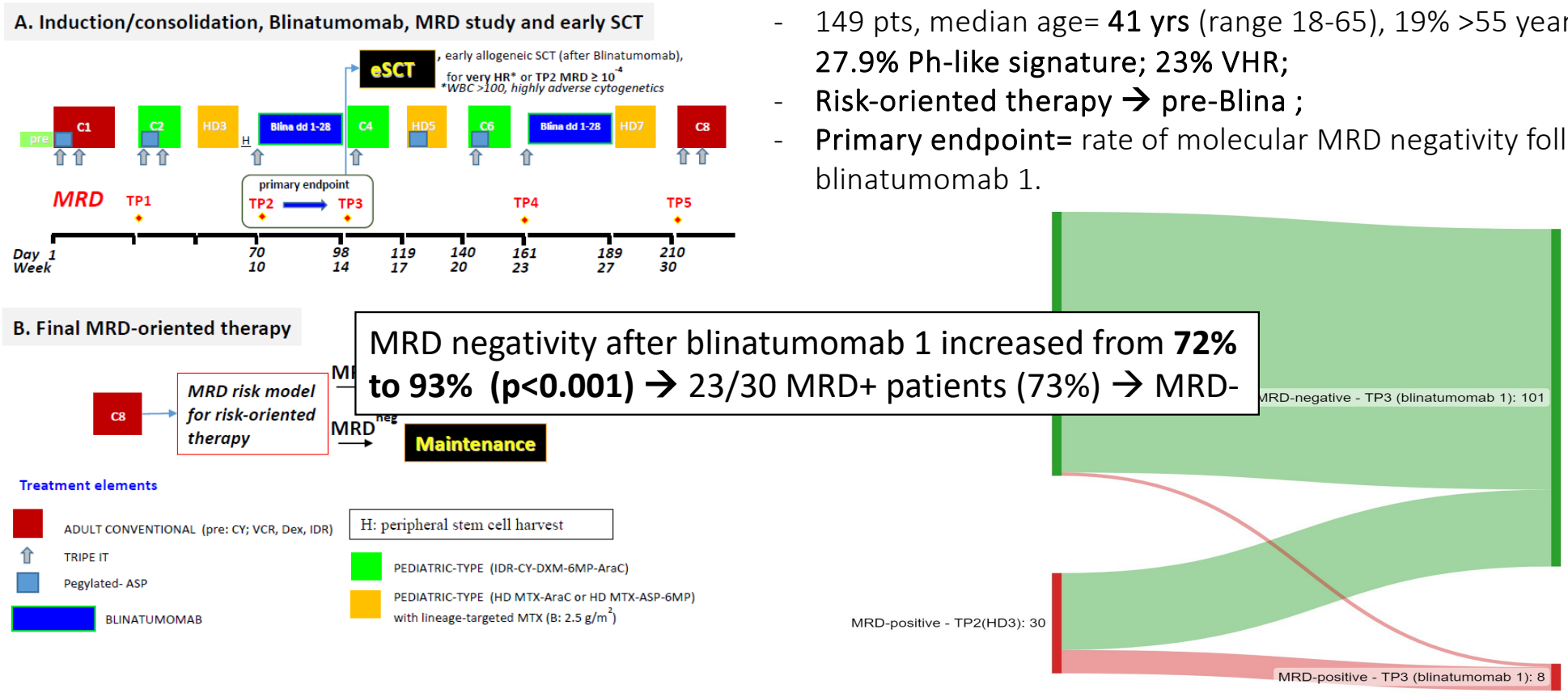
- All relapsed pts regained **MMR** (except for 1 who refused TKI restart, in follow-up) , in both groups;
- **4 pts** NGS-MRD neg in MDACC cohort in TFR group;
- No relapses in pts in MMR **>4 yrs** in MDACC cohort, 1 in CAMPUS ALL cohort;

[1]Dragani M. et al. Haemtologica, 2025; [2]Kugler E. ASH 2024,

Highlights on Acute Lymphoblastic Leukemia

- Ph+ B-ALL
- **Ph- B-ALL**
- New strategies

Ph-Negative B-ALL **Up-front Blinatumomab Improves MRD Clearance and Outcome in Adult Ph- B-lineage ALL: the GIMEMA LAL2317 Phase 2 Study**



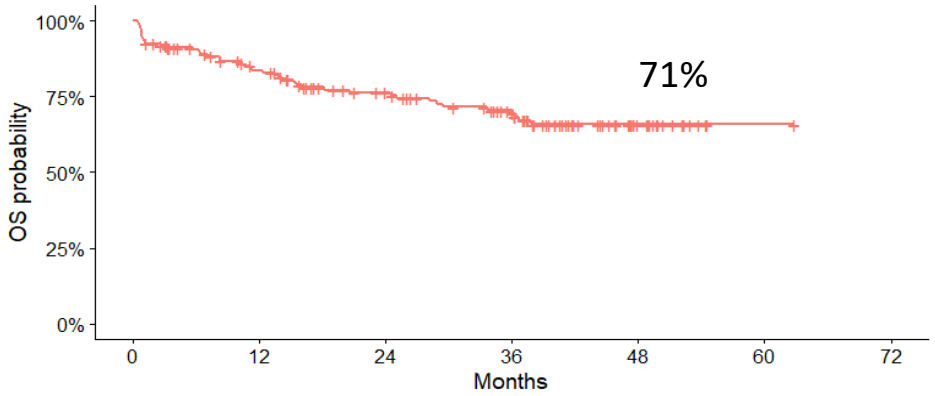
- 149 pts, median age= **41 yrs** (range 18-65), 19% >55 years; **27.9% Ph-like signature; 23% VHR;**
- **Risk-oriented therapy → pre-Blina ;**
- **Primary endpoint=** rate of molecular MRD negativity following blinatumomab 1.

MRD negativity after blinatumomab 1 increased from **72%** **to 93% (p<0.001)** → 23/30 MRD+ patients (73%) → MRD-

Bassan R, et al. Blood. 2025

Ph-Negative B-ALL **Up-front Blinatumomab Improves MRD Clearance and Outcome in Adult Ph- B-lineage ALL: the GIMEMA LAL2317 Phase 2 Study**

OS



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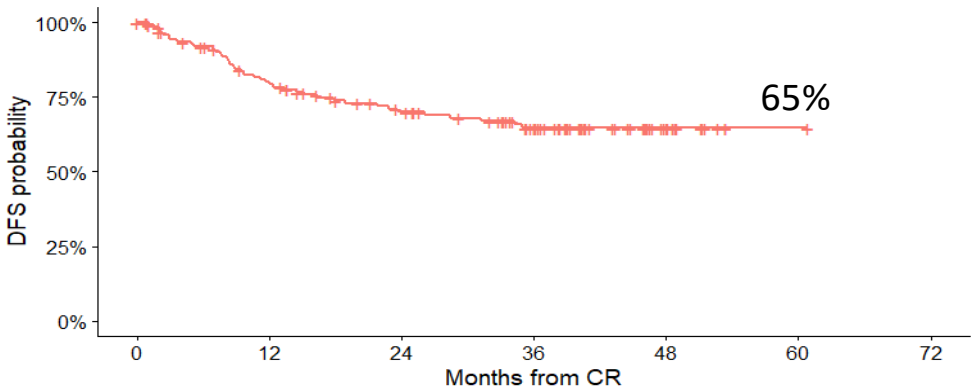
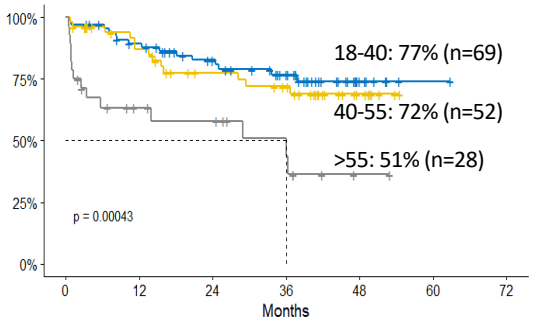
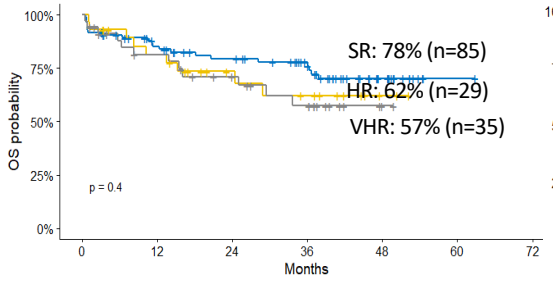


OS

Age



Risk class



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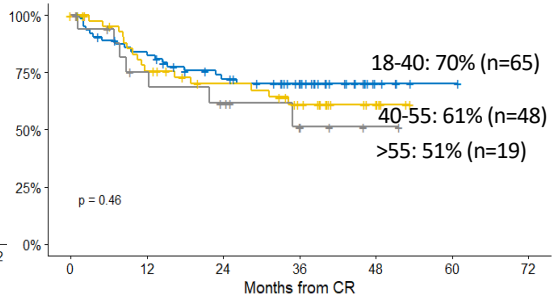
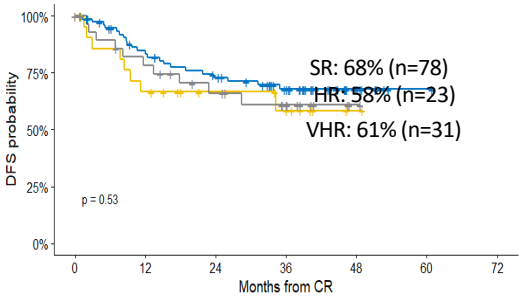
Age



Risk class

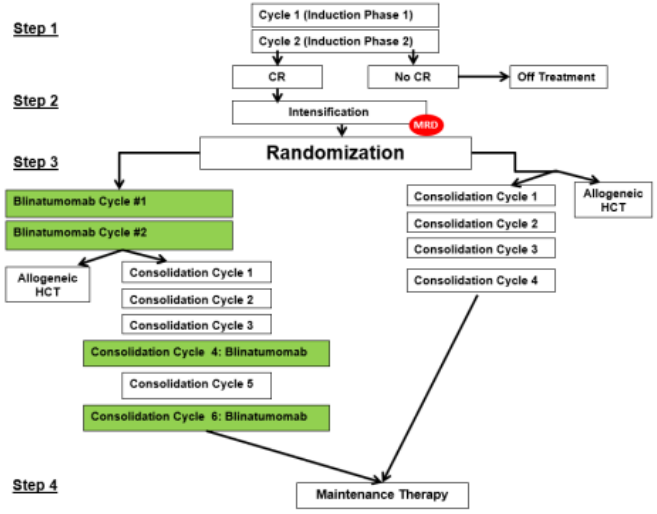


Bassan R, et al. Blood. 2025

Ph-Negative B-ALL

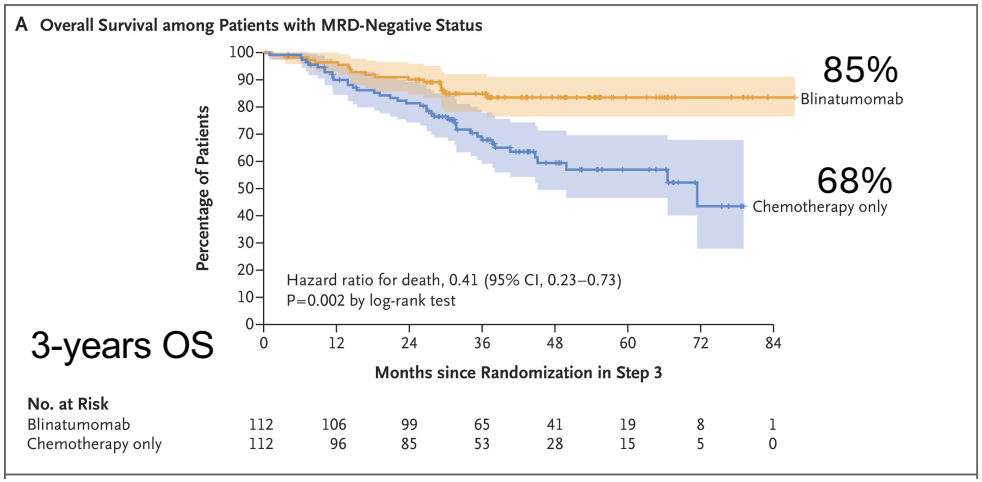
Blinatumomab for MRD-Negative Acute Lymphoblastic Leukemia in Adults

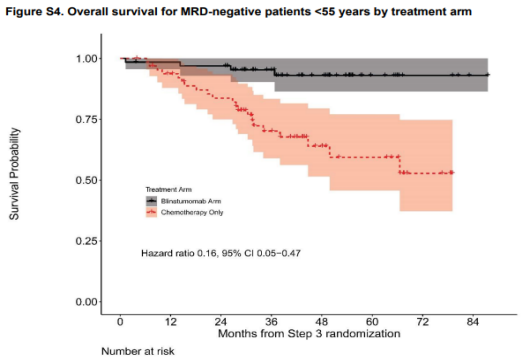
- BCP-ALL, Ph negative, aged 30-70 yrs;
- **224 MRD negative pts (FCM)** → randomization 1:1 Blina vs chemo-only consolidation;
- Primary endpoint: **OS in the MRD-negative** subpopulation
- Median follow up: 43 months;

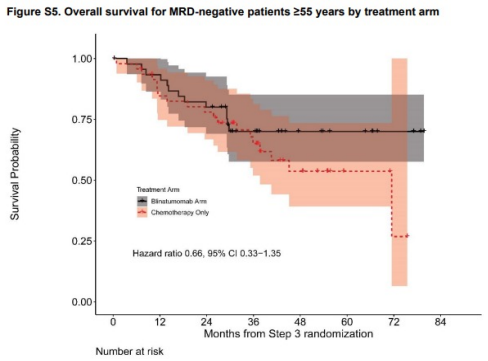


- Deaths: 17 in blina-group (**8** from relapse) vs 40 in chemo-only group (**31** from relapse).
- Transplant performed equally in both arms.
- Treatment-related non-hematologic toxicity:

gr. 3 43% vs 36%
gr. 4 in 14% vs 15%
gr. 5 in 2% and 1% in blina vs chemo arm







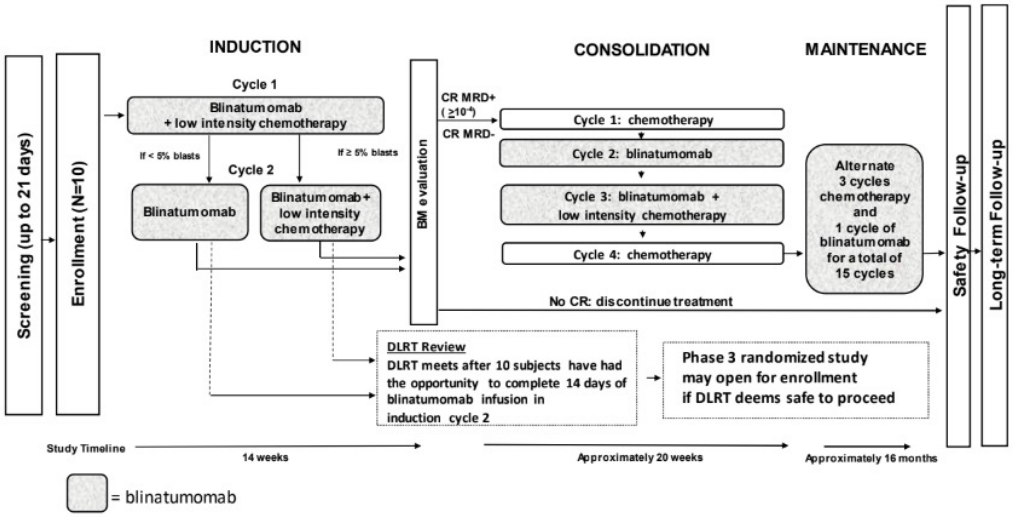
FDA and EMA approval

Litzow MR, et al. N Engl J Med. 2024

Ph-Negative B-ALL

Blinatumomab alternating with low-intensity
Chemotherapy in older adults with newly diagnosed B-cell Acute Lymphoblastic Leukemia (ALL): safety run-in follow-up for
the phase 3 GOLDEN GATE study

Figure 1-2. Single-arm Safety Run-in Study Schema



- **> 55 years** ND Ph- B-ALL, CNS+ excluded (n=14 pts);
- Median age was **71** years (range 57-78);
- Median follow up= 6.7 months;
- 94.9% CR after week 14, 84.6% MRD-;
- **Toxicity:** 6 neurologic AE (1 non-reversible); no blinatumomab discontinuation due to neurological events, no >G3 CRS and Neurotoxicities;
- 2 relapses (1 EMD);
- Enrolling in selected centers in Italy!

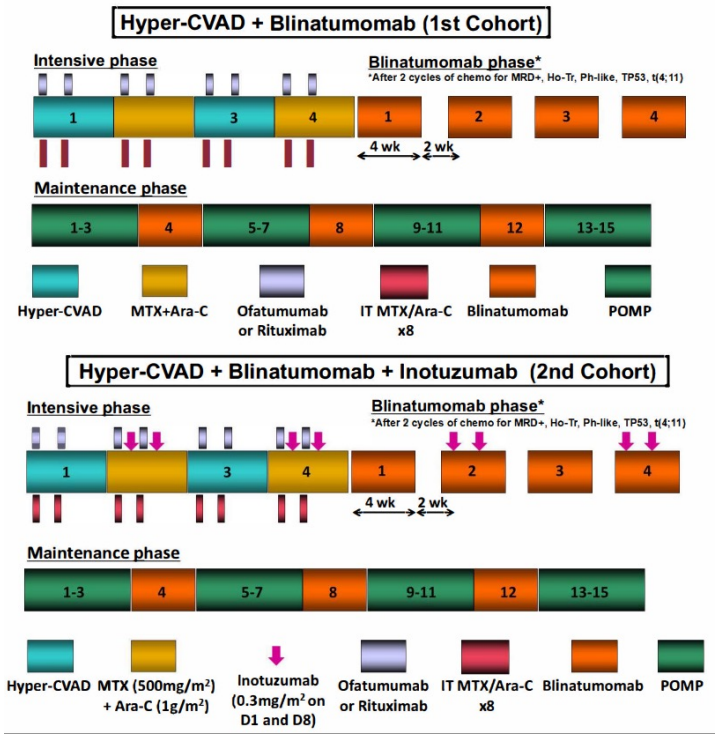
Highlights on Acute Lymphoblastic Leukemia

- Ph+ B-ALL
- Ph- B-ALL
- **New strategies**

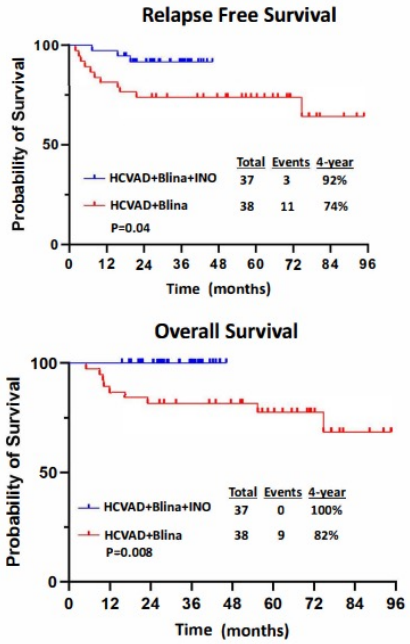
New Strategies

Updated Results from a Phase II Study Hyper-CVAD, with or without Inotuzumab Ozogamicin, and Sequential Blinatumomab in Patients with Newly Diagnosed B-Cell Acute Lymphoblastic Leukemia

- 75 pts with ND Ph-neg B-ALL, (including pts who received 1 prior cycle of CHT);
- Median age= 33y (18-59);
- 48% HR cytomolecular features; no CNS3.



- 84% CR after 1° cycle (50/59)*; 71% NGS-MRD neg CR overall.
- Median follow-up= 38 months (5-91).



*16 pts in CR, 10 in CMR before enrollemnt

- Estimated 3-year RFS was 82% and the 3-year OS 90% (both cohorts);
- HR pts outcomes comparable to SR (3y-OS 86% VS 95% p=0.3);
- No difference between SCT in 1° CR vs >2CR (p=0.9); neither for HR pts + SCT;

- 1 Blina discontinuation ; **no VOD so far (24 pts transplanted);**
- 10 relapses: 3 CNS (2 CNS-only), 2 relapses after SCT (both harboring TP53 mutation)→ amended to **15 doses of IT therapy;**

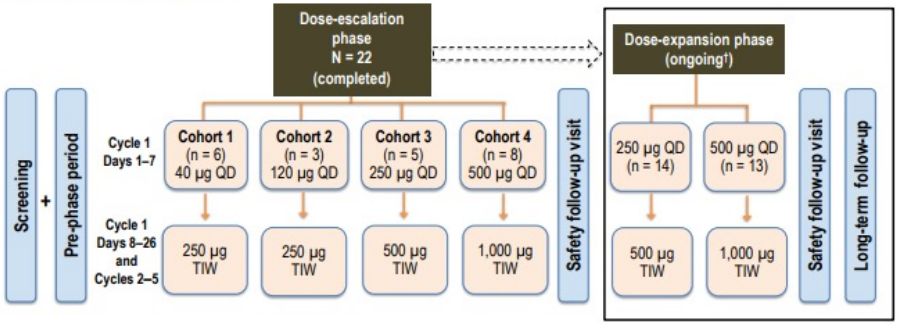
Nguyen D., ASH 2024

New Strategies

Single-Agent Subcutaneous Blinatumomab for Advanced B-Cell Acute Lymphoblastic Leukemia: Long-Term Follow-up from a Phase 1b Dose Expansion Cohort;

- 27 pts R/R BCP-ALL;
- Median age = 52 yrs (range 19-78)
- 1-5 Blinatumomab cycles (SCT permitted after 1°);
- EMD included (1 «other» localization);
- Median lines of therapy 2 (1-5): 9 Primary refractory, 8 prev. SCT, 4 prev. CAR-T, 7 prev. InO, 5 prev. Blina EV;
- At data cut off 18 pts ALIVE;

Figure 1. Study Design



EFFICACY

Table 6. Efficacy with SC Blinatumomab Monotherapy

	250 µg QD→500 µg TIW (n = 14)	500 µg QD→1000 µg TIW (n = 13)	All (n = 27)
Achieved CR/CRh/CRi/BMR within 2 cycles*	12/14 (85.7%)	12/13 (92.3%)	24/27 (88.9%)
Relapsed	1/12 (8.3%)	1/12 (8.3%)	2/24 (8.3%)
Death due to disease progression	3/12 (25%)	2/12 (16.7%)	5/24 (20.8%)
Duration of response (DOR), Kaplan-Meier, months, median (range)†	5.8 (3.8–7.4+)†	12.6 (1.8–13.9+)†	12.2 (1.8–13.9+)†
Follow-up for DOR, Kaplan-Meier, months, median (range)	5.9 (0.7–7.4)	6.3 (0.5–13.9)	5.9 (0.5–13.9)
Negative for MRD ($<10^{-4}$) within 2 cycles	10/12 (83.3%)	12/12 (100%)	22/24 (91.7%)
Received HSCT	7/12 (58.3%)	6/12 (50%)	13/24 (54.2%)
Alive in relapse	0	1	1
Alive in remission	3	4	7
Died in relapse or due to disease progression	3	1	4
Died in remission	1‡	0	1‡
Deaths	6/14 (42.9%)	3/13 (23.1%)	9/27 (33.3%)
Time to death, Kaplan-Meier, months, median (range)†	14.5 (0.3–18.7+)†	NE (0.7–19.3+)†	NE (0.3–19.3+)†
Follow-up for survival, Kaplan-Meier, months, median (range)	13.5 (0.2–18.7)	14.4 (11.3–19.3)	14.1 (0.2–19.3)

Data are n (%) unless indicated otherwise.*Three patients did not have response evaluation - two due to fatal adverse events, unrelated to SC blinatumomab monotherapy, and one patient requested to discontinue treatment. †+ indicates a patient is still in follow up. ‡Cause of death is unknown for this patient (best response CR). BMR, bone marrow response; CR, complete remission with full hematologic recovery; CRh, complete remission with partial hematologic recovery; CRi, complete remission with incomplete hematologic recovery; HSCT, hematopoietic stem cell transplant; MRD, measurable residual disease; NE, not estimable; QD, once daily; SC, subcutaneous; TIW, three times weekly.

Jabbour E., ASH 2024

New Strategies

Single-Agent Subcutaneous Blinatumomab for Advanced B-Cell Acute Lymphoblastic Leukemia: Long-Term Follow-up from a Phase 1b Dose Expansion Cohort;

SAFETY

Table 5. Summary of Treatment-emergent Adverse Events

	250 µg QD→500 µg TIW (n = 14)	500 µg QD→1000 µg TIW (n = 13)
Treatment-emergent adverse events (TEAEs), any grade		
Grade ≥ 3 TEAEs		
Serious TEAEs		
Serious TEAEs leading to D/C of SC blinatumomab monotherapy (excluding DP)		
Fatal adverse events*		
Grade ≥ 3 TEAEs of interest		
Cytokine release syndrome		
Blinatumomab-associated neurotoxicity‡		
Infections		
Alanine aminotransferase increased		
Aspartate aminotransferase increased		

Data are n (%). *One patient in the blinatumomab monotherapy 250→500 µg cohort developed cerebral edema and one patient in the blinatumomab monotherapy 500→1,000 µg cohort developed DP with hepatic failure, both considered unrelated to SC blinatumomab. †One grade 3 CRS event at 250→500 µg occurred on Day 7, 1 day after restarting SC blinatumomab monotherapy following 5 days of interruption due to a grade 1 CRS. ‡Two grade 3 neurologic events occurred in Cycle 2, one at 250→500 µg (Cycle 2 Day 8) and one at 500→1,000 µg (Cycle 2 Day 3). §Includes one grade 3 headache associated with lumbar puncture. CRS, cytokine release syndrome; D/C, discontinuation; DP, disease progression; QD, once daily; SC, subcutaneous; TEAE, treatment-emergent adverse event; TIW, three times weekly.

Table 3. Baseline Disease Characteristics

	250 µg QD→500 µg TIW (n = 14)	500 µg QD→1000 µg TIW (n = 13)	Total (n = 27)
Bone marrow blasts, %, median (range)	70 (15–95)	80 (5–98)	74 (5–98)
Prior treatment lines, median (range)	2 (1–5)	2 (1–6)	2 (1–6)
Prior inotuzumab ozogamicin	4 (28.6)	3 (23.1)	7 (25.9)
Previously received cIV blinatumomab	2 (14.3)	3 (23.1)	5 (18.5)
Primary refractory	7 (50.0)	2 (15.4)	9 (33.3)
Relapsed after prior HSCT	5 (35.7)	3 (23.1)	8 (29.6)
Relapsed after prior CD19 CAR T–cell therapy	4 (28.6)	0 (0.0)	4 (14.8)
Extramedullary disease	1 (7.1)	0 (0.0)	1 (3.7)
Central nervous system	0 (0.0)	0 (0.0)	0 (0.0)
Testis	0 (0.0)	0 (0.0)	0 (0.0)
Other sites	1 (7.1)	0 (0.0)	1 (3.7)

Data are n (%) unless otherwise indicated. CAR, chimeric antigen receptor; cIV, continuous intravenous infusion; HSCT, hematopoietic stem cell transplant; QD, once daily; TIW, three times weekly.

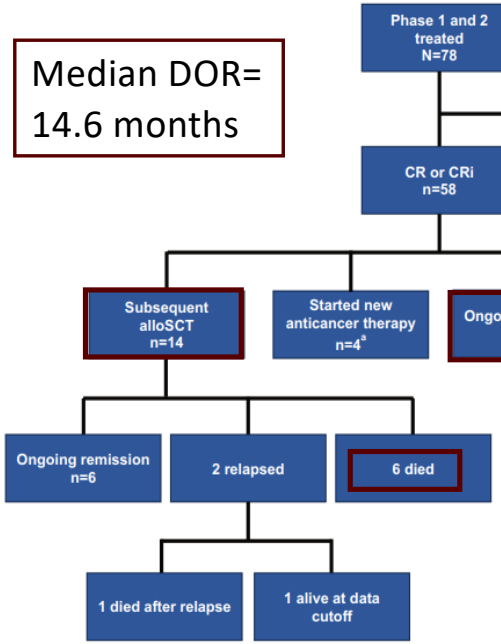
Jabbour E., ASH 2024

New Strategies

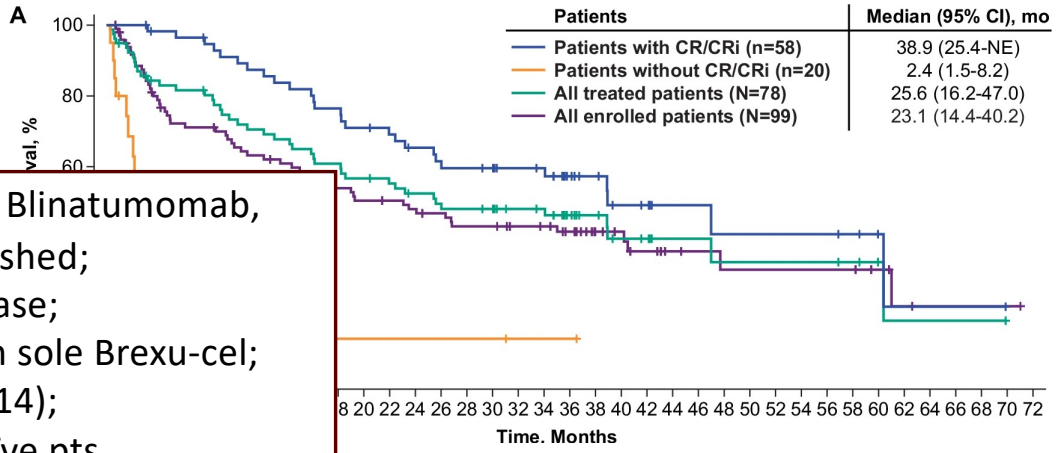
Three-year analysis of adult patients with relapsed or refractory B-cell acute lymphoblastic leukemia treated with brexucabtagene autoleucel in ZUMA-3

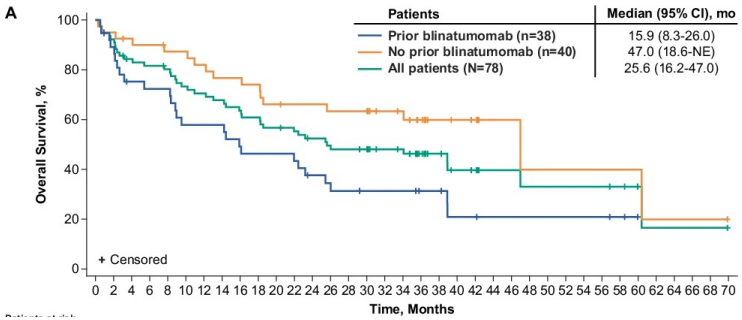
- Median follow-up 41.6 months;
- Median OS and RFS **25.6** and **11.6 months**, respectively;

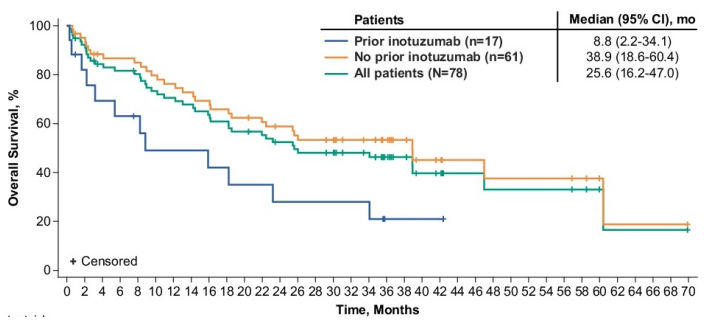
Median DOR= 14.6 months



- Role of prior treatments: Blinatumomab, Inotuzumab to be established;
- Role of high burden-disease;
- Long term remission with sole Brexu-cel;
- SCT related mortality (6/14);
- Grade >3 Nes in Blina naïve pts



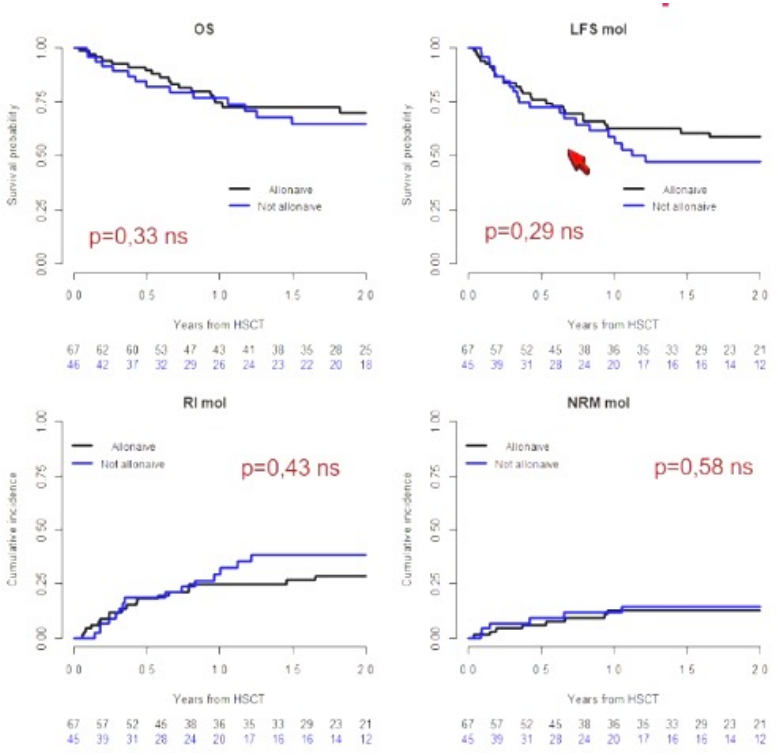




Shah BD, et al. Leukemia 2025

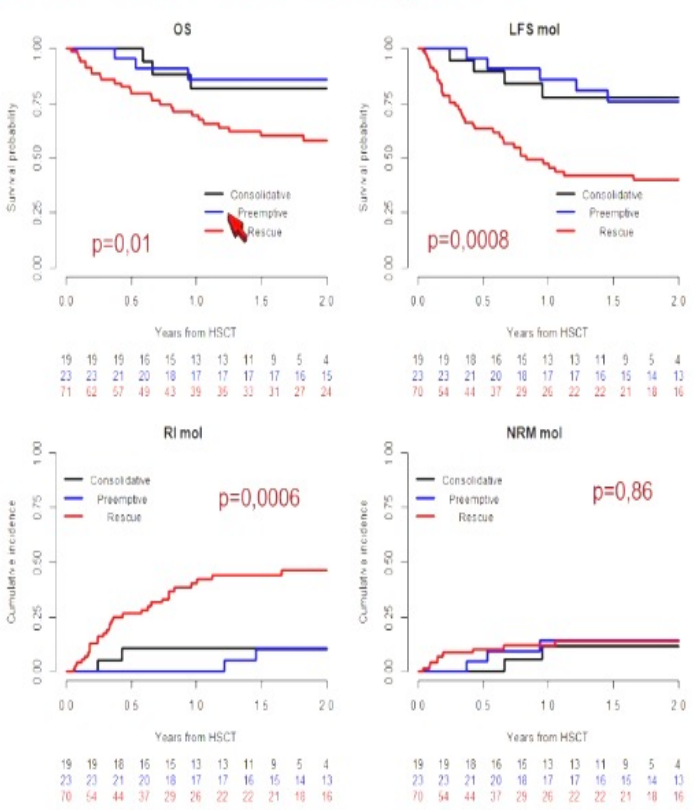
Role of prior and subsequent transplant in RW: GoCART

Prior transplant



Consecutive transplant

		Consolidative (N=19)	Preemptive (N=23)	Rescue (N=71)
Age at this HSCT	median [IQR]	13 [8.3-23.3]	13.6 [8.4-17]	15.9 [8.4-23.2]
Age at this HSCT	Adult	7 (36.8)	5 (21.7)	26 (36.6)
	Child	12 (63.2)	18 (78.3)	45 (63.4)
Allo HSCT before CART	No	17 (89.5)	17 (73.9)	33 (46.5)
	Yes	2 (10.5)	6 (26.1)	38 (53.5)
CART1	Kymriah	15 (78.9)	15 (65.2)	50 (70.4)
	ARI-0001	0 (0)	6 (26.1)	15 (21.1)
	BREYANZI	0 (0)	1 (4.3)	2 (2.8)
	Sheba CART	2 (10.5)	0 (0)	2 (2.8)
	Tecartus	2 (10.5)	1 (4.3)	1 (1.4)
	Tuebingen CART	0 (0)	0 (0)	1 (1.4)
Months first CART to HSCT	median [IQR]	3.5 [2.7-4.2]	4.4 [3.3-5.7]	9.7 [5.8-17.5]
Response after CART1	CR MRD neg	19 (100)	23 (100)	59 (84.3)
	CR MRD pos	0 (0)	0 (0)	8 (11.4)
	No CR	0 (0)	0 (0)	3 (4.3)
	missing	0	0	1
Myeloablative regimen	No	1 (5.3)	4 (18.2)	17 (25)
	Yes	18 (94.7)	18 (81.8)	51 (75)
	missing	0	1	3
TBI in conditioning regimen	No	1 (5.3)	9 (40.9)	32 (46.4)
	Yes	18 (94.7)	13 (59.1)	37 (53.6)
	missing	0	1	2



Ottaviano G, et al. Abs 112. ASH 2024

Role of prior and subsequent transplant in RW: CIBMTR

			Univariable analysis	Multivariable analysis[b]	
Outcome	Subgroups (n)	n Evaluable[c]	6-month rate, % (95% CI)	HR (95% CI)	
DOR*	**Post alloSCT**				
	No (n=164)	128	55 (42-66)		Reference
	Yes (n=76)	62	85 (71-92)		0.22 (0.10-0.49)
RFS*	**Post alloSCT**				
	No (n=164)	164	47 (37-56)		Reference
	Yes (n=76)	76	67 (55-77)		0.62 (0.40-0.96)
	MRD status prior to LD chemotherapy				
	CR/CRi, MRD negative	59	67 (52-78)		Reference
	CR/CRi, MRD positive	16	49 (19-74)		1.44 (0.60-3.45)
	Not in CR/CRi	148	47 (38-55)		2.08 (1.25-3.45)
	Ongoing infection at infusion				
	No (n=220)	220	58 (50-65)		Reference
	Yes (n=22)	22	27 (8-50)		1.80 (1.02-3.19)
OS	**ECOG PS**				
	ECOG PS <2 (n=200	200	80 (74-85)		Reference
	ECOG PS ≥2 (n=17)	17	63 (36-82)		2.05 (1.00-4.21)
	Ongoing infection at infusion				
	No (n=220)	220	82 (76-87)		Reference
	Yes (n=22)	22	53 (30-71)		2.67 (1.40-5.10)

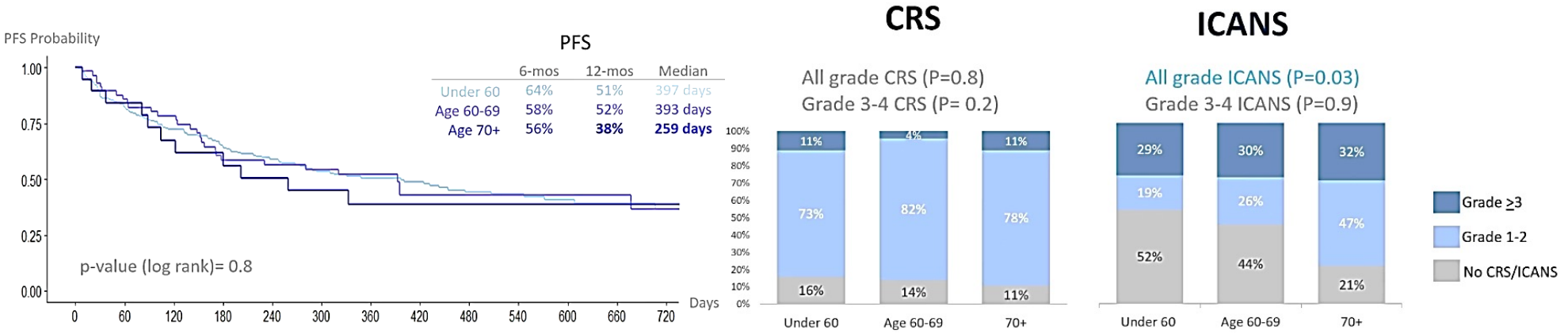
Apparently mild impact of post allo-SCT

Wudhikarn et al. ASH 2024 (Abstract 5092; poster/oral presentation)

New Strategies

Efficacy and safety of Brexucabtagene Autolucel for Relapsed/Refractory B-cell Acute Lymphoblastic Leukemia in patients aged 60 and above.

- Real world data (2021-2024): 296/318 pts infused with Brexu-Cell → **76** aged 60 or above;

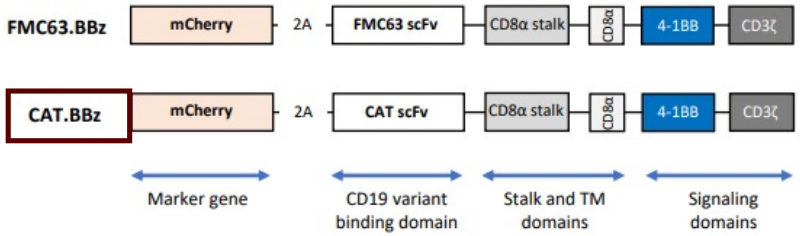


- **No difference in PFS, OS and CR rate by age except for 12-months PFS in 70+ subgroup (38% vs 51% <60yrs vs 52% 60-69yrs) → small sample size.**
- Higher incidence of ICANS 2-3 in 70+ subgroup;
- Longer median time to platelet recovery in 70+ group (51d vs 27d in <60yrs vs 31 in 60-69 yrs)

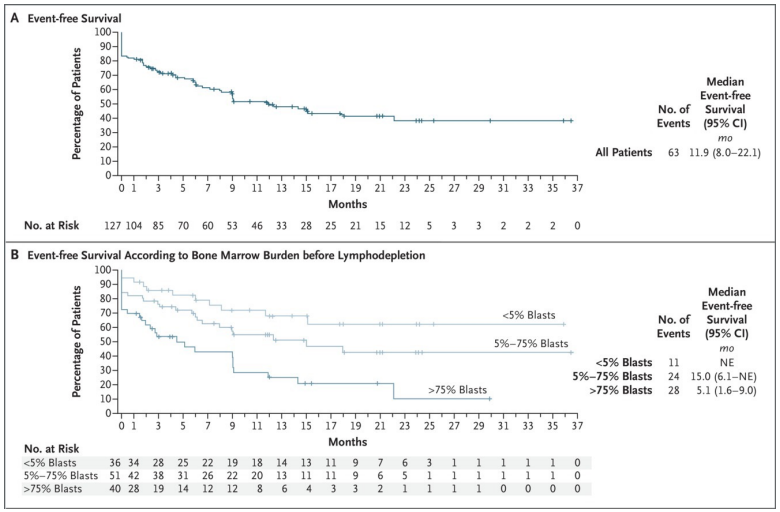
Muhsen I. et al. ASH 2024

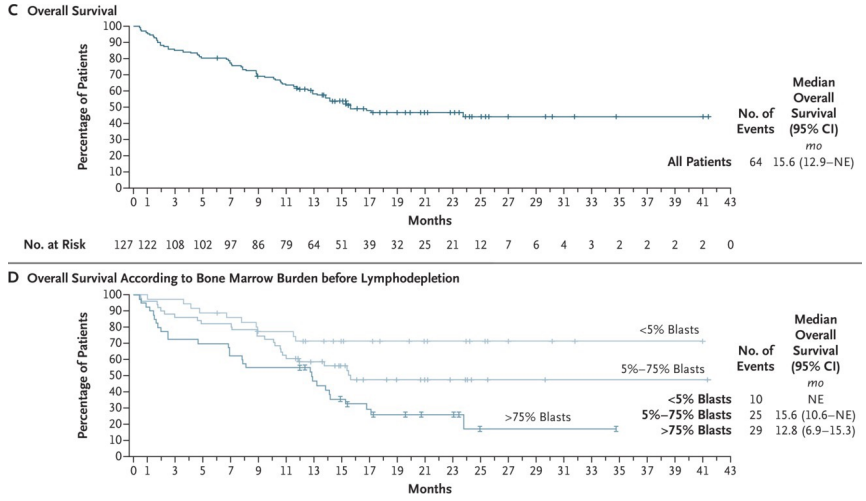
New Strategies Obecabtagene Autoleucel in Adults with B-Cell Acute Lymphoblastic Leukemia

- 127 R/R BCP-ALL infused
- Median age 47 yrs (20-81), median line of treatment 2 (1-6);
- Bone marrow burden–adjusted split dose of Obe-cel after lymphodepletion [clinician' choice];



*= autologous **41BB-ζ** anti-CD19 CAR T-cell therapeutic using a different scFv with **intermediate affinity to CD19** (instead of a high affinity); → reduction in toxic effects and improvement in CAR T-cell engraftment and persistence.*





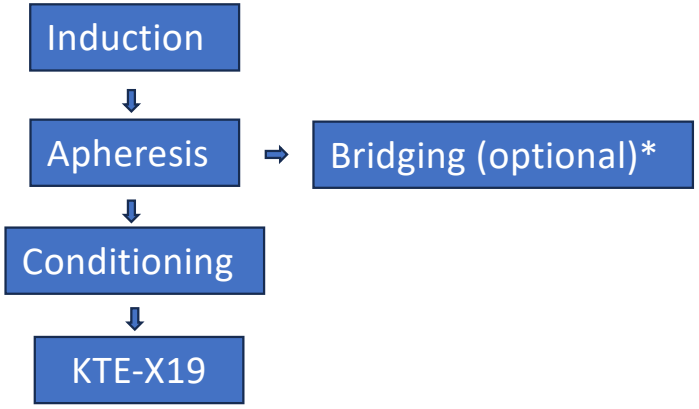
- Response in 77% of adults with refractory disease;
- Overall survival was 61% at 12 months, and serious toxic effects were rare.

Ghorashian S, et al. Nat Med. 2019; Roddie C et al. N Engl J Med2024

New Strategies

CD19-CAR T Cells As Definitive Consolidation for Older Adults with B-Cell Acute Lymphoblastic Leukemia in First Complete Remission: A Pilot Study

- B-ALL >55 yrs in CR1 after any frontline treatment (regardless MRD);
- Low-intensity bridging consolidation as LD;
- Primary endpoint: safety and tolerability;
- 13 pts infused enriched-memory CAR-T; median age 66y (range 55-79), 5 Ph+ ALL, 77% previously tretated with Blina.
- **All pts MRD- before LD.**
- **1 molecular relapse (Ph+ ALL)**



* Blasts > 0.1; bridging with either VCR + DXM or TKI

NO ICANS or ≥G2 CRS.

Aldoss I. et al. ASH 2024

Take home messages

- **Chemo-free approaches show excellent outcomes for Ph+ ALL with the caveat of:**
  - **extramedullary and CNS relapses;**
  - ***IKZF1*^{plus} signature → SCT?**
- **In RW setting chemo-free approaches not always feasible → LD Chemo + Ponatinib;**
- **Ph- ALL treatment still relies on chemotherapy but the addition of blinatumomab in first line is promising and safe**
- **Subcutaneous Blinatumomab showed encouraging response rate in R/R pts**
- **CAR-T are extremely effective in R/R BCP-ALL but correct allocation of pts is essential (timing, previous therapies etc)**
- **Post CAR-T SCT consolidation to be confirmed as the most effective strategy in R/R BCP ALL**

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Thank you!