OUTCOME OF ACUTE MYELOID LEUKEMIA RELAPSE AFTER ALLOGENIC STEM CELL TRANSPLANT: A SINGLE INSTITUTION RETROSPECTIVE STUDY

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INTRODUCTION

- With the advances in allogenic stem cell transplant (Allo-SCT), disease relapse is a main cause of treatment failure in acute myeloid leukemia (AML).
- The prognostic is very poor, and there is no standard of care in this situation.
- Our aim is to evaluate the outcome of AML post-transplant relapse.

METHOD

- A single institution series of 118 adult AML patients who relapse after allo-SCT between January 2009 and December 2019

PATIENT CHARACTERISTICS

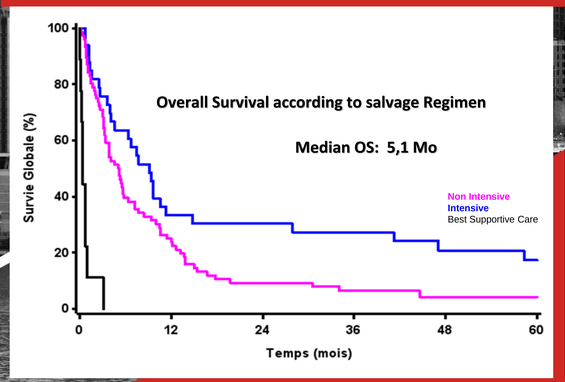
- Median age was 53 years [20-69]
- 1st allogeneic transplant was performed in complete rémission in 79% of case
- Median transplant-Relapse: 4,7 month (0,5-88)
- Salvage treatment:
  - 64% Non intensive
  - 28% Intensive
  - 8% Supportive care
- Median follow up 70,2 months (46,3-83,5)

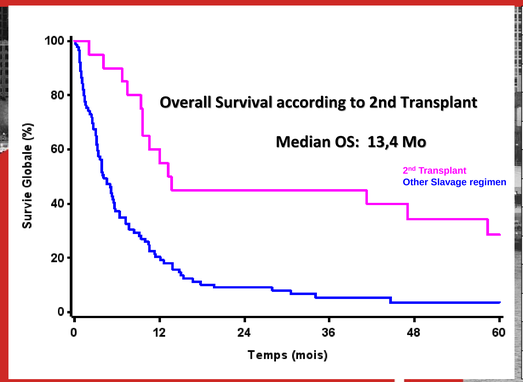
	Total n= 118	
	n	(%)
Statuts at 1st Transplant		
CR	93	79
Refractory	25	21
Conditionning		
Myeloablatif	46	39
Non myeloablatif	72	61
Donor		
Sibling	53	45
Match Unrelated	26	22
Haplo	21	18
Mismatch Unrelated	6	5
Cord blood	12	10
Sorror		
<3	41	38
≥3	66	62
Unavailable	11	
Time 1st Transplant/Relapse		
≤ 6 mo	64	54
> 6 mo	54	46

	Total n (%)	CR n (%)
Non intensive salvage regimen	76	14 (18%)
Azacytidine +/- DLI	54 (71%)	6 (11%)
Azacytidine + Sorafenib +/- DLI	10 (13%)	6 (60%)
FLT3 inhibitor	2 (3%)	1 (50%)
Other	10 (13%)	1 (10%)

	Total n (%)	CR n (%)	Early/Toxic death n (%)
Intensive Salvage Regimen	33	18 (55%)	6 (18%)
AraC-based	25 (76%)	12 (48%)	4 (16%)
GO-based	8 (24%)	6 (75%)	2 (25%)

RESULTS





	Hazard Ratio	[95% CI]	p-value
ELN 2017			
Adverse vs Favorable/ Inter	1.8	[0.68,4.81]	0.2391
AML status at transplant			
CR vs No CR	1.03	[0.56,1.88]	0,9241
Sorror			
< 3 vs ≥ 3	1.2	[0.71,2.02]	0,5
Time 1st transplant- Relapse			
< 6 mo vs ≥ 6 mo	0.62	[0.38,1.01]	0.0538
PS at relapse			
0-1 vs ≥ 2	2.51	[1.34,4.69]	0.038
Salvage regimen			
Intensive vs non intensive	1.52	[0.82,2.82]	0.1815

CONCLUSION

Our data are in line with published studies, and confirm the poor outcome of post-transplant relapse. Intensive salvage therapy shows reasonable response rate, but subsequent cellular therapy seems necessary to provide long term disease-free survival. Azacytidine in association with targeted therapy and/or DLI could be an alternative option to achieve remission.

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