AUTOLOGOUS STEM CELL TRANSPLANTATION FOR DIFFUSE LARGE B-CELL NON HODGKIN'S LYMPHOMA (DLBCL): REPORT OF THE "CENTRE NATIONAL DE GREFFE DE MOELLE OSSEUSE DE TUNIS"

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INTRODUCTION

- High dose chemotherapy (HDC) followed by autologous peripheral stem cell transplantation (APSCT) is indicated either:

- **In first remission for high risk patients with DLBCL (IPI≥2) + age 16-60 years**

- **In case of chemosensitive relapsed or primary refractory DLBCL.**

- We report here the results of this procedure in the Tunisian " Centre National de Greffe de Moelle Osseuse de Tunis" and we will compare these results in the 2 situations.

PATIENTS AND METHODS

- **From June 2000 to June 2015**
- **A total of 134 autologous PSCT were performed at our center for B phenotype NHL**
- **Indications:**
  - **Group1: High risk patients in first remission : N=100**
  - **Group 2: Patients with chemosensitive relapsed or primary refractory NHL in second remission: N=34**

PATIENT'S CARATERISTICS (1)

Caracteristics	Group 1 N=100	Group 2 N=34
Median age , year (range)	36 (17-59)	43 (18-59)
Sexe ratio	45/45 (1)	23/11 (2,09)
Histological subtype		
DLBCL	99	32
Richter	1	**2**
IPIaa		
0-1	0	11
2-3	100	**23**
Initial regimen		
CHOP + others	21	19
ACVBP	79	15
Rituximab -/+	21/79	9/25 (73%)

PATIENT'S CARATERISTICS (2)

Caracteristics At transplant	Group 1 N=100	Group 2 N=34
Indication of ASCT	Consolidation	Refractory 15 Relapsed NHL 19
Disease Status CR+CRu PR	 65% 35%	 19 (56%) 15 (44%)
Median time, (range) Last CT –ASCT Diagnosis- ASCT	 38 days (20-107) 112 days (74-158)	 34 days (21-120) 16 months (5-180)

TRANSPLANT PROCEDURE

- **Conditioning regimen consisted in standard BEAM regimen (BICNU, Etoposid, Cytarabin, Melphalan)**
- **Adjustment of dose of Melphalan (50%) to renal function: 2 patients**
- **PBSC : 6,15 x10^6 CD34+/kg (range; 1,9- 19,8)- Group1**
  5,5 x10^6 CD34+/kg (range; 1,44- 13,3)- Group 2
- **PBSC + Bone marrow : 2 patients (group 2)**

Results : Engraftments (1)

	Group 1	Group 2
Median day, range		
ANC> 500/mm^3	**11 (9-28)**	**11 (9 - 35)**
Platelets ≥20 x10^3/mm^3	**12 (9-38)**	**16 (10- 62)**
Transfusion Requirements:		
- RBC : units (range)	**2 (0-10)**	**4 (0- 20)**
- PCA: units (range)	**3 (0-19)**	**6 (2- 30)**

TRANSPLANT-RELATED TOXICITY (1)

	Group 1	Group 2
Stomatitis G3-4	50%	85%
Febrile neutropenia		
Median (range)	1,58 (0-4)	2 (1-4)
Septicemia	19%	19%
Candidemia	2%	2%

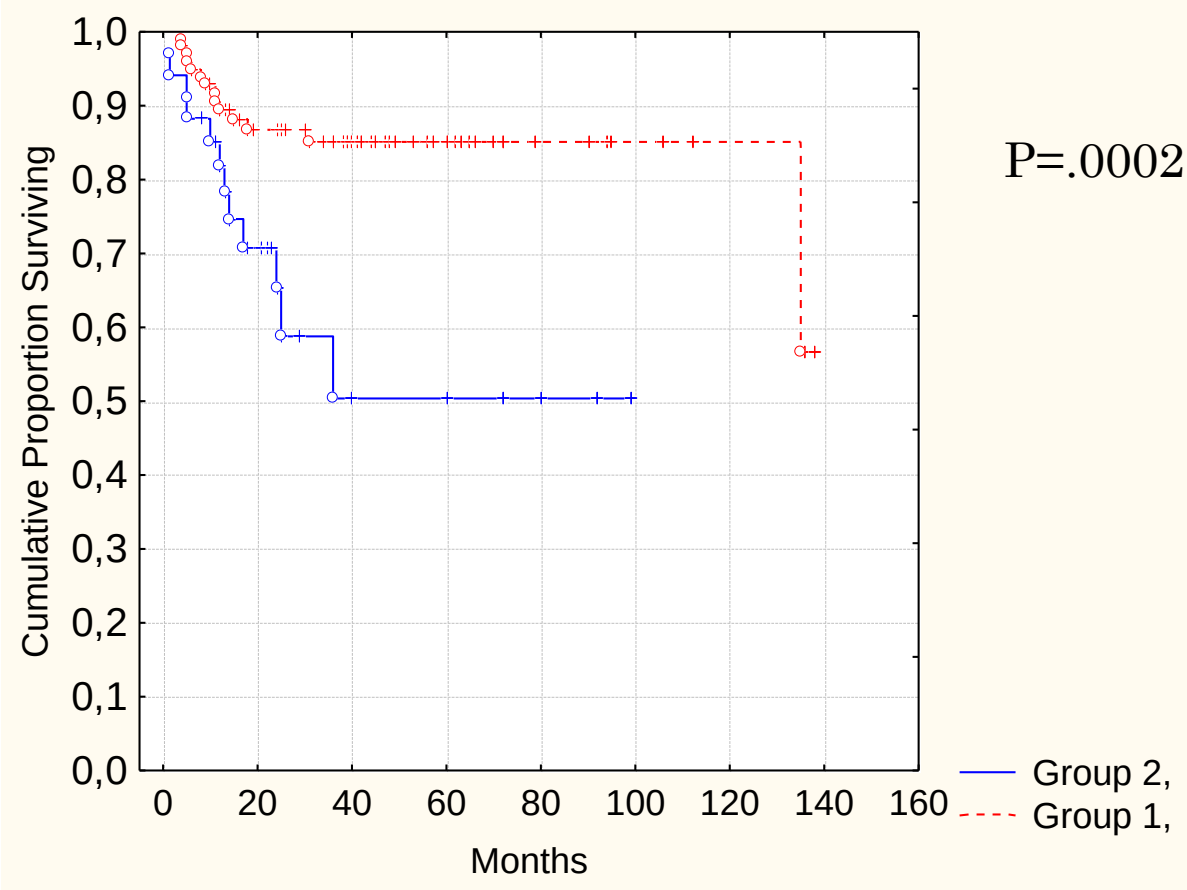
TRANSPLANT-RELATED TOXICITY (2)

Toxicity	Group 1	Group 2
Renal toxicity G1-2	4%	7 (20%)
Hepatic toxicity VOD	0%	2 (5,7%)
CMV Infection	4%	6 (17%)
Macrophage Activation Syndrome	0%	4 (11%)
Treatment Related Mortality	1% (endocartite)	2 (5,7%) (PNP-Septic S.)

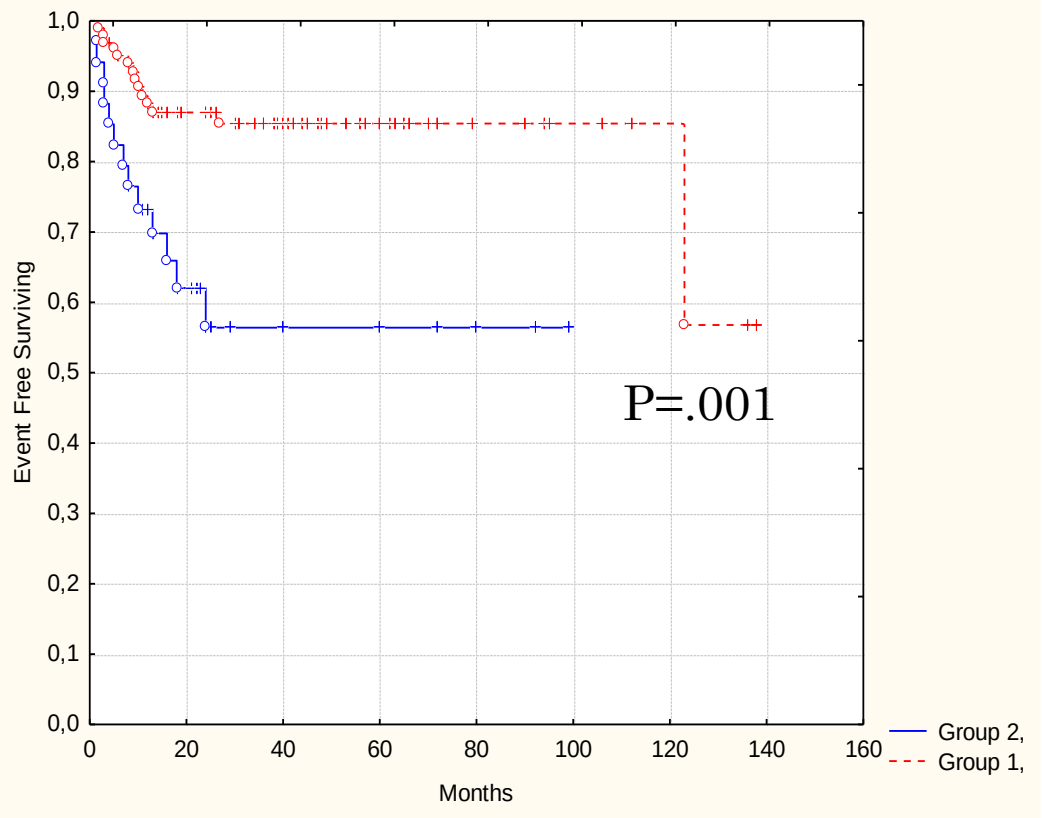
THERAPEUTIC RESULTS

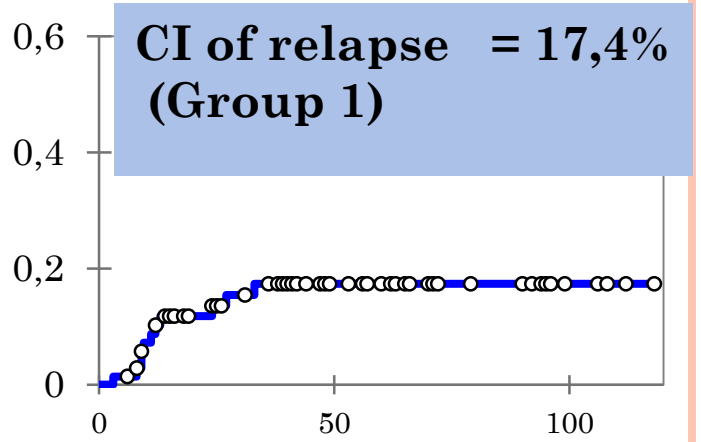
	Group 1	Group 2
Disease Status, at 3 months		
CR+PR	94%	28/32 (87,5%)
Progressive	6%	4/32 (12,5%)
CI of Relapse	17%	42%
Median follow-up, Months (range)	48 (4-138)	24 (38days-118)
Overall survival, at 3 and 5years	84%	50% P=.0002

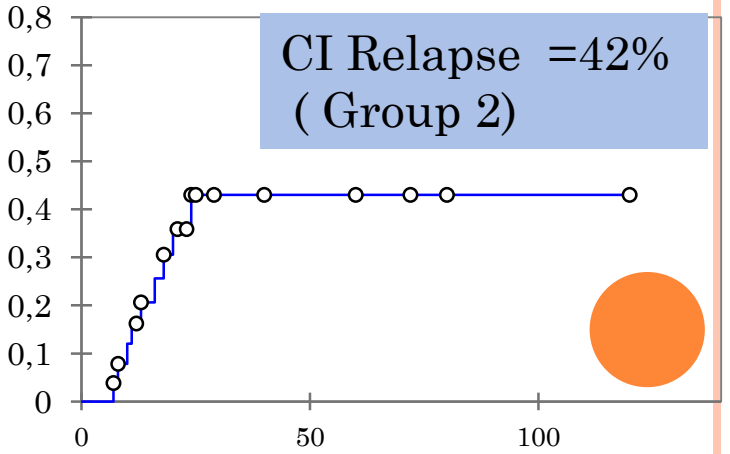
Overall Survival (Kaplan-Meier)



Event Free Survival and cumulative incidence of relapse

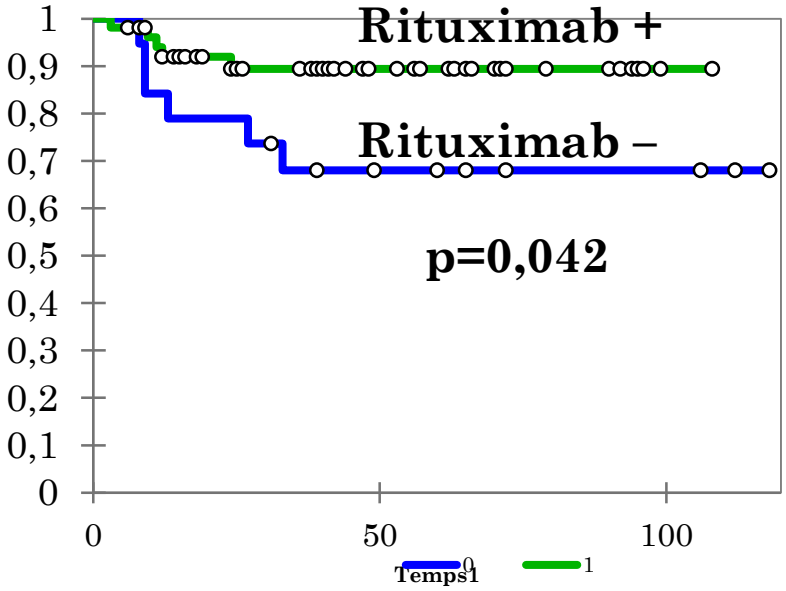




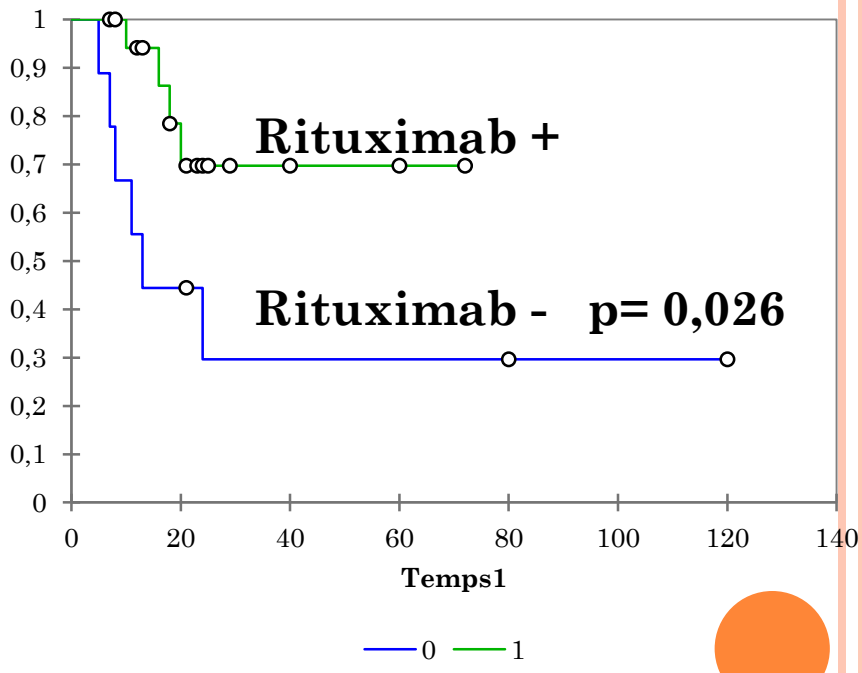


DFS CURVES ACCORDING PRIOR TREATMENT + OR WITHOUT RITUXIMAB

Group 1



Group 2



Conclusion

- The present results demonstrate a **high rate of efficacy** and **low toxicity** of the consolidative ASCT in **high-risk patients with DLBCL**
- The present results demonstrate **a limited efficacy** (50%) and **moderate toxicity** of the ASCT in **CHEMOSENSITIVE relapsed or primary refractory DLBCL**
- Addition of **Rituximab** to Chemotherapy **significantly reduce the risk of relapse**.
- Perspective: impact of others prognostic factors?

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