

response (VGPR) before transplantation was 41. 9%. Post-transplant ratio of patients with  $\geq$ VGPR estimated to be 75. 8%. There were no significant differences between patients with a pre-transplant response  $\geq$ VGPR and partial response (PR) in terms of PFS (median 33 vs 24 months,  $p=0.3$ ), TTP (not reached vs 25 months,  $p=0.2$ ), TNT (not reached vs 33 months,  $p=0.09$ ), and OS (not reached vs 71 months,  $p=0.8$ ) (Figure 1). **Conclusions.** Patients with multiple myeloma who achieve PR or  $\geq$ VGPR before transplantation have similar disease outcomes. Since only 30% of patients will have a  $\geq$ VGPR with novel agents, at least PR is a reasonable pre-transplant treatment goal.

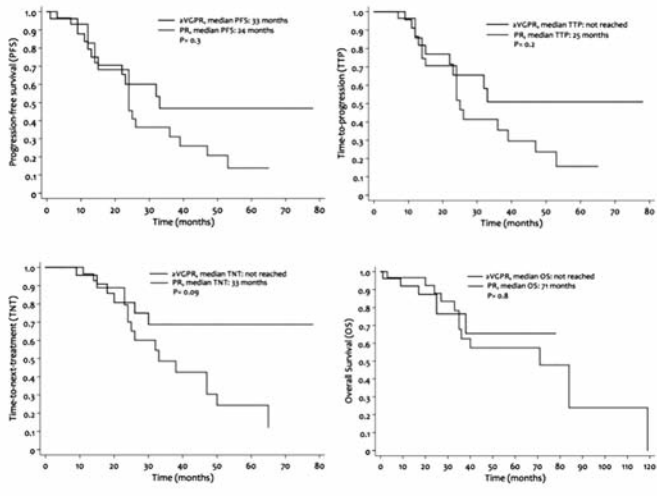


Figure 1.

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#### WHAT IS THE CONTRIBUTION OF HOST-DERIVED CMV IMMUNITY AFTER ALLOGENEIC TRANSPLANTATION FOLLOWING NONMYELOABLATIVE CONDITIONING?

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**Background.** It has been suggested that host-derived CMV-specific immunity could persist in patients given grafts following nonmyeloablative conditioning. **Aims.** In the current study, we challenged this hypothesis by assessing chimerism levels among CMV-specific CD8+ T cells around days 40, 100 and 180 after allo-HCT in a cohort of 24 patients given allogeneic grafts after nonmyeloablative conditioning. **Methods.** Data from 24 patients given unmanipulated peripheral blood stem cells (PBSC) after nonmyeloablative conditioning were included in this study. Detection of CMV-specific CD8+ T cells was performed on previously cryopreserved peripheral blood mononuclear cells (PBMCs) according to the combinatorial encoding method of CMV pMHC multimers. CMV specific and unspecific CD8+ T cells were sorted into distinct tubes. DNA was isolated from cell pellets to assess their chimerism. **Results.** Only 4 of 17 CMV-seropositive recipients given grafts from CMV-seronegative donors had a higher by  $>25\%$  proportion of cells of recipient origin among CMV-specific CD8+ T cells (ranging from 32. 4 to 100%) than among remaining CD8+ T cells on day 100 after transplantation. The 2 patients with CMV-specific CD8+ T cells that were  $>99\%$  of recipient origin on day 100 had relatively high counts of CMV-specific CD8+ T cells on that day (13. 1 and 14. 7 cells/ $\mu$ L). **Conclusions.** these results demonstrate that high numbers of CMV-specific CD8+ T cells of recipient origin could be present after allo-HCT, although in a minority of nonmyeloablative recipients.

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#### FEASIBILITY OF AUTOLOGOUS STEM CELL TRANSPLANTATION IN PATIENTS WITH NON-HODGKIN'S LYMPHOMA OLDER THEN 65 YEARS

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**Introduction.** Autologous peripheral stem cell transplantation is the standard therapy for the treatment of lymphoma into the young patient who expresses

poor prognostic factors at diagnosis or at relapse (high IPI). Only few data are available on the feasibility and outcome of such procedures in patients over 65 years. **Aims.** We conducted a single centre, retrospective, study on the feasibility and the results of autologous transplantation in patients carrying a lymphoma, aged 65 or over, compared to younger patients. **Patients and Methods.** Over a period of 10 years we identified 151 patients with lymphoma who performed autologous stem cell transplantation at BREST (France) transplantation centre. 95 patients were under 65 years and 56 patients were older. We compared two populations in terms of number of units of red blood cells and platelets transfused, number of days of neutropenia and incidence of complications related to transplantation procedure. **Results.** No statistically significant difference was seen, between the two populations, for the number of units transfused (CG: 2. 9/3. 7  $p=0.21$  and CPA: 4. 51/4. 18,  $p=0.58$ ). The only significant difference ( $p=0.0006$ ) is the duration of aplasia: 11. 22 days for younger patients and 11. 81 days in elderly patients. The mortality rate associated with the procedure (MRT) is similar in both groups of patients with 2 deaths in each arm. There was no statistically difference between the two populations, regarding the OS (40,91/38. 33,  $p=0.11$ ) and DFS (39. 4/33. 18,  $p=0.048$ ). **Conclusions.** In our study we found that there was no significant difference between the two populations (over or under 65 years) for the number of units of blood and platelet transfusions. Only the difference of days of neutropenia appears to be significant and it is for the young patient. The autograft procedure remains under certain conditions, a possible treatment option for patients older than 65 years treated for lymphoma.

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#### HEMATOLOGICAL RECOVERY AND EARLY RISK INFECTION: EFFECT ON THE EVOLUTION AFTER AUTOTRANSPLANTATION

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**Background.** Absolute lymphocyte count (ALC)  $<=500/\mu$ l on day(D)15 post-autologous haematopoietic stem cell transplantation (HSCT) has been proposed as an independent risk factor in the outcome undergoing HSCT in patients (P) with hematologic malignancies **Aims.** The aim of study is to compare the influence of ALC, absolute neutrophil count (ANC) and absolute platelet count (APC) recoveries on the risk of early infection (REI) post-HSCT ( $D<=30$ ) and survival **Methods.** Medical records of 113 P (59 non Hodgkin lymphoma (NHL), 22 Hodgkin lymphoma (LH) and 32 multiple myeloma (MM)) receiving autologous-HSCT between January 2006 and March 2012 in La Paz University Hospital were reviewed. The analysis of the relationship between hematological recovery post-HSCT (ALC $>500/\mu$ l on D15, APC $>20000/\mu$ l on D15 and ANC $>500/\mu$ l on D12), REI, overall survival (OS) and progression-free survival (PFS) was performed by Mann-Whitney U test, Chi-Square test and log rank test, we also applied survival curves of Kaplan-Meier and Cox regression model **Results.** Median of days required to ALC $>500/\mu$ l was 14 (range: 12-17), ANC $>500/\mu$ l was 14 (range: 12-16) and APC $>20000/\mu$ l was 12 (range: 10-15). We found statistically significant differences between REI and ALC $>500/\mu$ l at that D (60% vs. 36%,  $p=0.02$ ; OR 2. 69 (CI95%: 1. 23-5. 85)) and ANC $>500/\mu$ l at that D (37% vs. 61%,  $p=0.0017$ ; OR 2. 73 (CI95%: 1. 22-6. 07)). We found no significant association between REI and APC $>20000/\mu$ l (63% vs. 41%,  $p=0.09$ ; OR 2. 50 (CI95%: 0. 95-6. 57)). There is a significant relationship between post-HSCT survival and hematological recovery so that, ALC $>500/\mu$ l on D15 ( $n=67$ ) is associated with better PFS and OS, than ALC below this limit ( $n=46$ ): PFS 65 months (m) (CI95%: 58-72) vs. 31 m (CI95%: 20-41),  $p<0.0001$  and OS 126 m (CI95%: 117- 134) vs. 54 m (CI95%: 55-74),  $p<0.01$ ; APC $>20000/\mu$ l on D15 ( $n=90$ ) is associated with better PFS but no OS, than APC below this limit ( $n=23$ ): PFS 56 m (CI95%: 48-63) vs. 33 m (CI95%: 18-48,  $p<0.007$  and OS 118 m (CI95%: 108-129) vs. 61 m (CI95%: 47-75),  $p<0.116$ ; ANC $>500/\mu$ l on D12 ( $n=39$ ) is not associated with better PFS or OS, than ANC below this limit ( $n=74$ ): PFS 48 m (CI95%: 40-57) vs. 56 m (CI95%: 45-68),  $p<0.217$  and OS 119 m (CI95%: 104-134) vs. 71 m (CI95%: 65-77),  $p<0.787$ . Multivariate analysis showed that P those to reach ALC  $500/\mu$ l after D15 and P with HL or MM have higher risk of relapse with HR 4. 56 (CI95%: 2. 3-9. 04),  $p<0.001$  and HR 2. 56 (CI95%: 1. 17-5. 63),  $p=0.019$  **Conclusions.** 1) The study shows that P with ALC $<500/\mu$ l on D15 have 3 time more probability of REI and P with ANC $<500/\mu$ l on D12 have 2 time less probability. 2) We confirm positive prognosis impact of ALC $>500/\mu$ l on the evolution after autotransplantation. 3) No achieve APC  $20000/\mu$ l on D12, is a worse prognosis factor for PFS but no affect to OS or REI 4) NHL has lower risk of relapse after autologous- HSCT.