All the patients are alive in remission at the present time with median post SCT survival of 9.4 months (2.1-18.5).
Conclusion: Posttransplant Rux appears to be safe and feasible. Further investigation is warranted to elucidate whether improved outcomes are due to a direct effect on the primary marrow disorder, alleviation of the constitutional symptoms or GvHD.

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Delayed and Sudden Lymphocyte Recovery Is the Predictive Sign of Primary Graft Failure Following CBT, Single Institute Analysis of 105 CBT

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Background: Primary graft failure (pGF) after cord blood transplantation (CBT) still occurs in roughly 10% of cases. Although associated with a poor prognosis, cases diagnosed early have an increased possibility of rescue with re-transplantation. We considered an early stage diagnostic method by elucidating mechanisms underlying post-CBT pGF.
Patients and Method: We analyzed 105 cases of single-unit CBT at our institution. For pGF cases, we analyzed WBC dynamics (neutrophils, lymphocytes), chimerism, and fever, and compared these parameters with delayed (>day 28) or normal (≤day 28) engraftment cases.
Results: Of the evaluable 102 cases, 59 were normal engraftment cases, 33 were delayed engraftment cases, and 10 were pGF cases. Of the 10 pGF cases, 7 showed essentially no blood cell count recovery by day 14, and sudden lymphocyte recovery at a median of day 18 (range, 15-24) followed by graft rejection. Of the 4 assessed for chimerism at the time of lymphocyte increase, all showed recipient-derived cells. 3 of the 10 pGF cases never achieved WBC≥100/μL by day 28. For engraftment cases, lymphocyte number peaked at day 12, and almost cases assessed for chimerism showed donor-derived cells. Only 1 of the 67 cases which showed WBC >100/μL on day 12 indicated pGF, whereas pGF was observed in 9 of the 33 cases in which WBC was <100/μL ($p<0.001$). 72 cases had febrile episodes which were associated with pre-engraftment immune reaction. The proportion of febrile (≥38°C) cases peaked at day 8 for normal engraftment cases, day 11 for delayed engraftment cases, and day 12.5 for pGF cases.
Conclusions: pGF likelihood should be considered for cases of delayed timing of non-infectious fever, cases for which WBC recovery is not seen at around day 12, and cases of sudden lymphocyte recovery at around day 18.

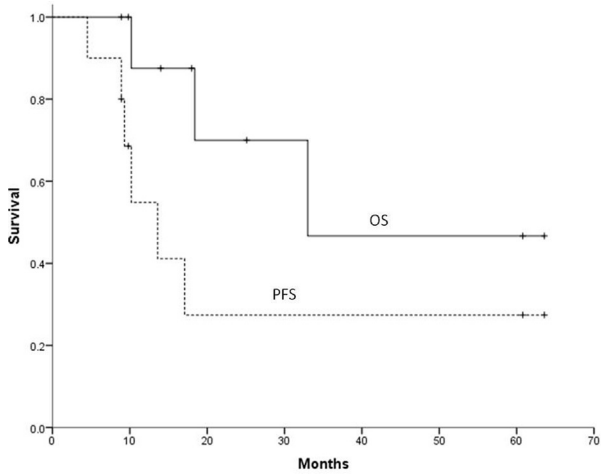

Figure.

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Anti CD20 Radioimmunotherapy and mTOR Inhibition in Reduced Intensity Conditioning Hematopoietic Stem Cell Transplantation for Relapsed/Refractory B Cell Lymphomas

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A subset of patients with advanced or relapsed B-cell lymphomas can be cured with allogeneic hematopoietic cell transplantation (allo-HCT), but success is hampered by the risk of recurrence and GVHD. Here we report the results of a phase 2, single center trial combining anti-CD20 radioimmunotherapy (RIT) with I-131 tositumomab and mTOR inhibition with sirolimus for prevention of serious GVHD and reduction in risk of relapse. Subjects (n=10) received I-131 tositumomab 75cGi therapeutic dose on day -12, fludarabine 25 mg/m^2 IV on days -6 to -2 and melphalan 70 mg/m^2 IV on days -3 and -2 followed by peripheral blood grafts from 7/8 or 8/8 HLA matched related or unrelated donors. GVHD prophylaxis consisted in sirolimus 12 mg PO loading dose on day -14 in order to overlap with the conditioning regimen, then 4 mg PO daily with target blood level of 3-12 ng/ml, and

Table.

Age	Sex	Disease	Prior Auto	N prior therapies	Status at transplant	Donor	CD34 dose 1 (x10e6/kg)	CD3 dose (x10e8/kg)	aGVHD max grade	cGVHD	Time of relapse (months)	Follow-up (months)	Outcome
41	M	FL	Yes	4	CR	MRD	3.18	3.38	3	Yes	8.9	18.4	Death from disease
87	M	DLBCL	Yes	3	PO	MUD	1.9	0.3	0	Yes		63.6	Alive
64	M	DLBCL	No	2	PR	MUD	1.84	2.97	0	Yes		60.8	Alive
54	F	MCL	No	2	PR	MUD	10.19	3.57	0	Yes		10.2	Death from PE
52	M	DLBCL	Yes	4	PR	MRD	2.94	4.22	0	Yes	9.3	33.0	Death from disease
69	M	FL	Yes	5	PR	MUD	10.39	1.61	0	Yes	13.6	25.1	Alive
39	M	DLBCL	No	2	PR	MUD	6.87	2.24	0	No	17.1	18.0	Alive after relapse
35	F	DLBCL	No	2	PR	MRD	5.87	3.01	0	No	4.5	14.0	Alive after relapse
61	M	DLBCL	No	2	CR	MMRD	7.9	3.01	0	Yes		9.8	Alive
46	F	DLBCL	No	1	CR	MMUD	4.03	112	0	Yes		8.9	Alive