Prima Giornata Fiorentina dedicata ai pazienti con malattie mieloproliferative croniche

Venerdì 15 aprile 2011

la mielofibrosi:
Opzioni Trapiantologiche

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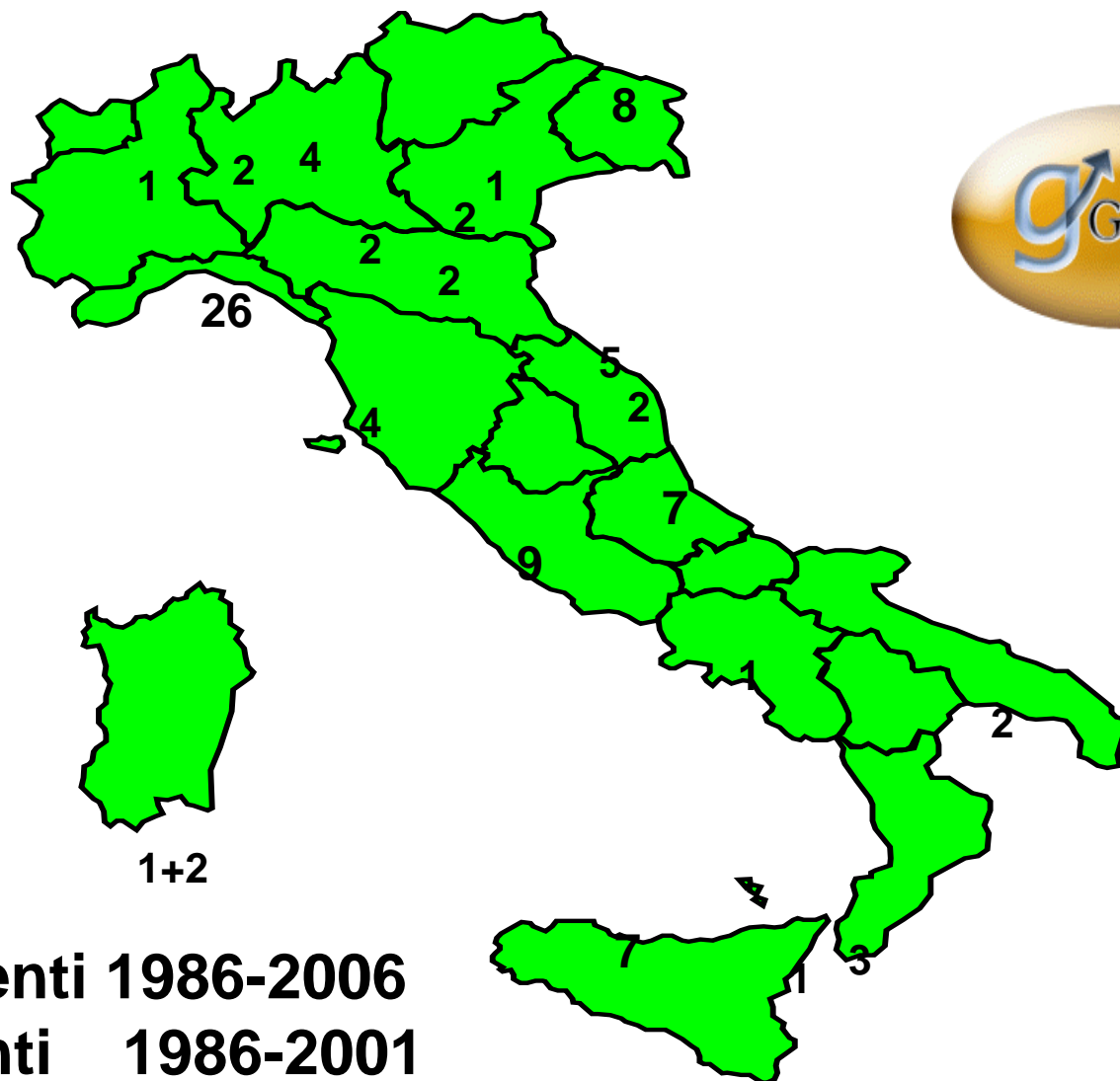
La rarità

Le indicazioni

Il trapianto mieloablativo

Il trapianto RIC

I fattori prognostici

La splenectomia

100 pazienti 1986-2006
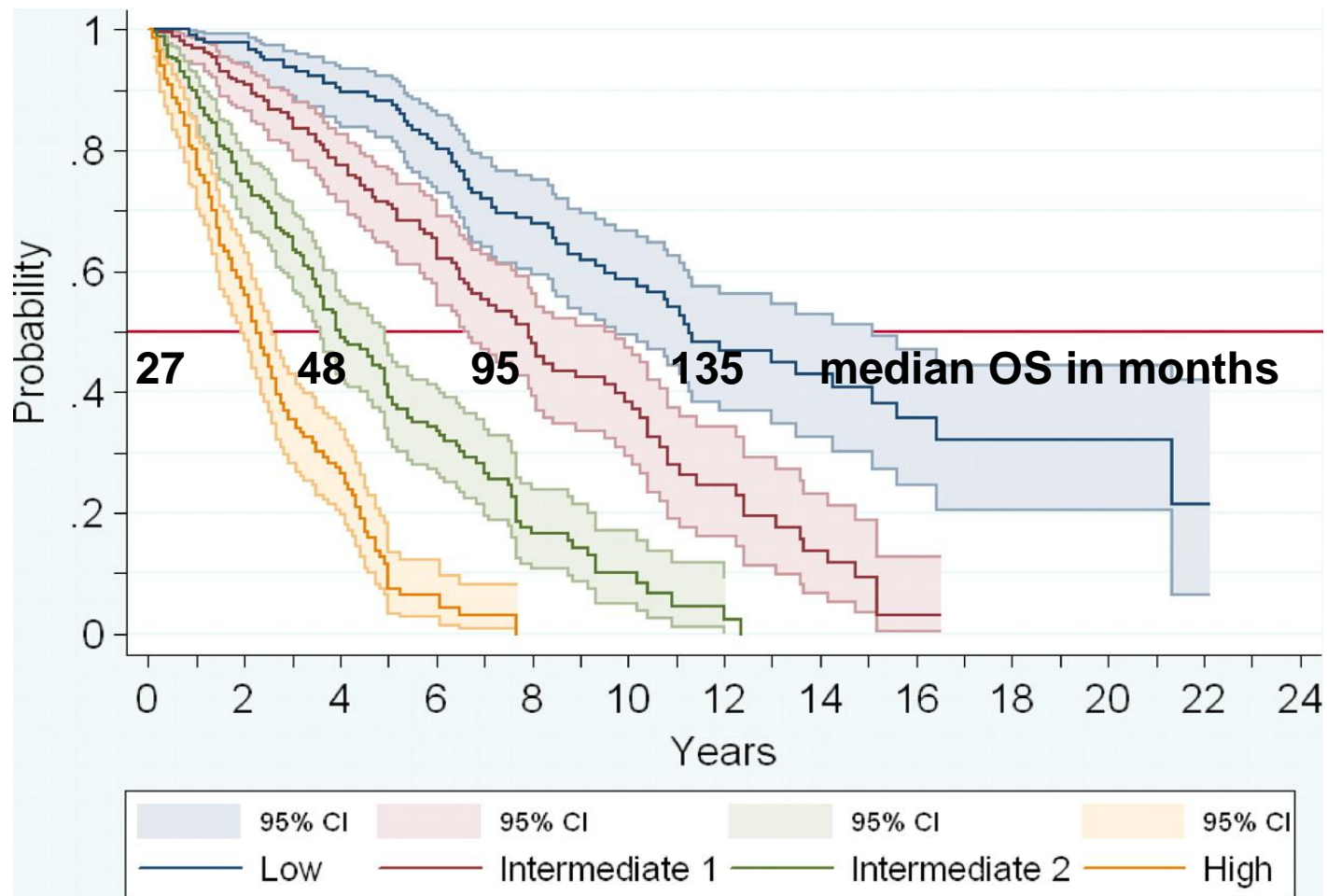**35 pazienti   1986-2001**
65 pazienti   2002-2006 : 13 pazienti /anno
56 pazienti   2006-2009: 17 pazienti/anno

PROGNOSTIC SCORES ON MYELOFIBROSIS

score	Lille 1996	Mayo Clinic 1998	Cervantes<55y	Cervantes 2009
Unfavourable Variables (UV)	• Hb<10g/dL • WCc<4 or >30x10^6/L	• Hb<10g/dL • WCc<4 or >30x10^6/L •PLT<100x10^9/L •Monocytes c<1x10^9/L	•Hb<10g/dL •Blasts >1% •Constitutional symptoms	•Age >65y •Hb<10g/dL •Blasts >1% •Constitutional symptoms •WCc >25x10^6/L
	Score N°UV OS	Score N°UV OS	Score N°UV OS	Score N°UV OS
	LOW 0 93 m INT 1 36m HIGH 2 13 m	LOW 0 173 m INT 1 61m HIGH ≥ 2 26 m	LOW 0-1 176 m HIGH 2-3 33 m	LOW 0 135m INT-1 1 95m INT-2 2 48 m HIGH 3 27 m

Figure 2 Actuarial survival curves of the 4 risk groups of patients according to the new PMF prognostic system
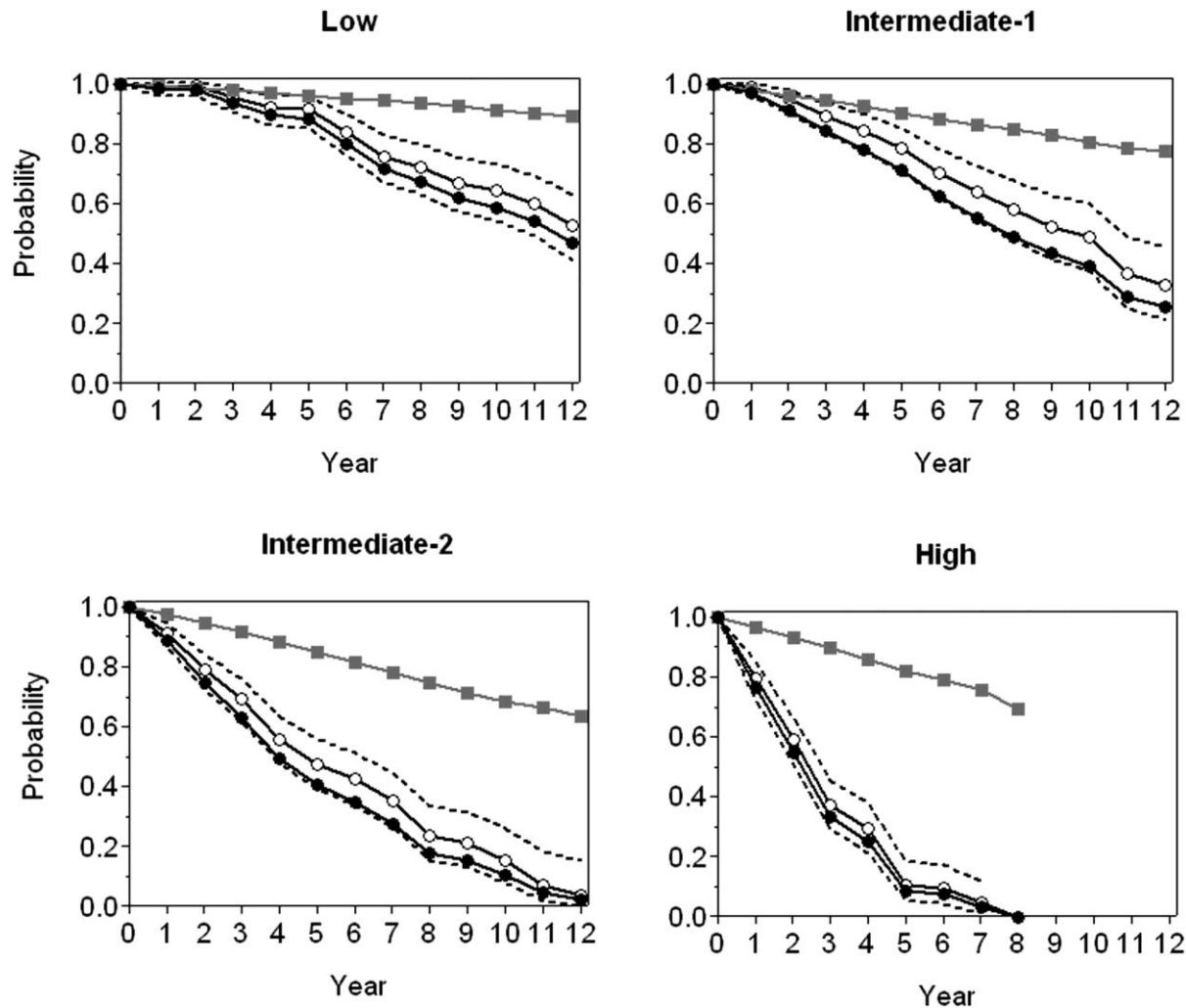

Figure 2 Actuarial survival curves of the 4 risk groups of patients according to the new PMF prognostic system

27   48   95   135   median OS in months

N° UV   0   1   2   3

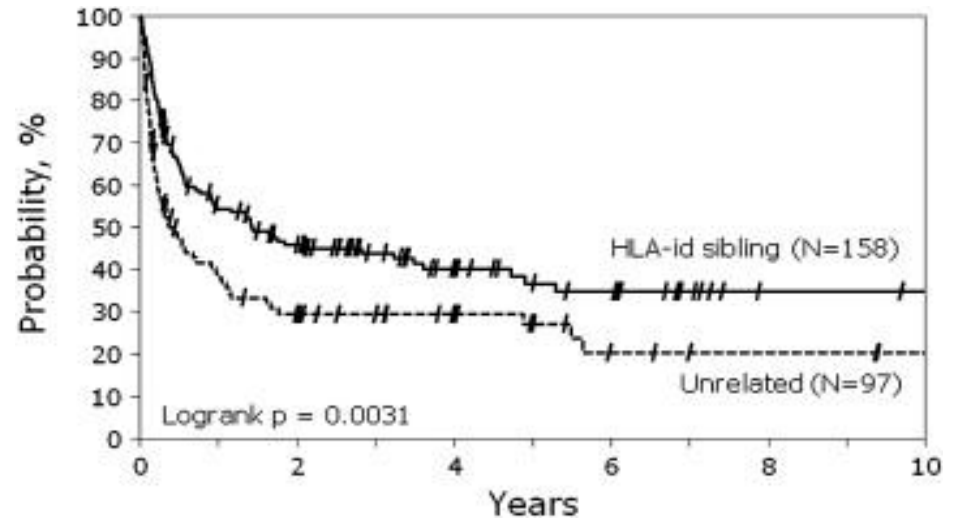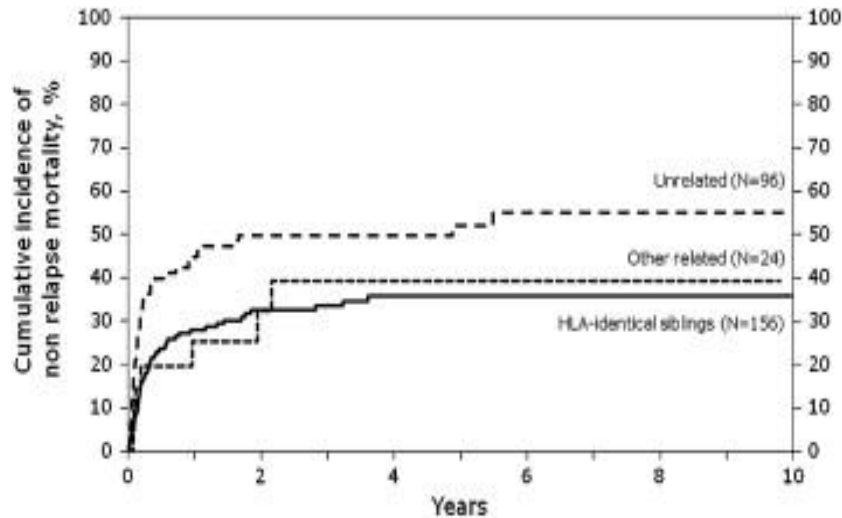# Figure 4 Relative survival of the 4 risk groups compared with that of the general population

Cervantes, F. et al. Blood 2009;113:2895-2901

ALLOGENEIC SCT AFTER *STANDARD MYELOABLATIVE* CONDITIONING

	Guardiola '99	Daly 2004	Ditshkowski '04	Kerbauy 2007	Patriarca-GITMO 2008	Ballen 2010 CIBMTR
N° pts	55	25	20	104	100	289
Median age	42 (4-53)	48 (46-50)	45 (22-57)	49 (18-70)	49 (21-68)	47 (18-73)
Conditioning	myelo	myelo	myelo	myelo	49% myelo	86% myelo 57% Bu-Cy
Donor Rel/unrel	49/6	15/10	13/2	59/45	82/18	162/127
Graft failure	9%	9%	n.v	10%	12%	18%
NRM	27% (1y)	48% (1y)	40% (3y)	34% (3y)	43% (3y)	36% (3y)
OS	47% (5y)	41% (2y)	38% (3y)	51% (5y)	42% (5y)	36% (5y)

OUTCOME OF TRANSPLANT FOR MYELOFIBROSYS: THE CIMTR registry (between 1989-2002)

Ideal candidate for myeloablative transplant:

- Age younger than 40 years
- Anemia or leukocytosis
- No comorbidity
- HLA- identical sibling

Ballen et al, BBMT 2010

Allogeneic hematopoietic stem cell transplantation in myelofibrosis: the 20-year experience of the *Gruppo Italiano Trapianto di Midollo Osseo* (GITMO)

Francesca Patriarca,[1] Andrea Bacigalupo,[2] Alessandra Sperotto,[1] Miriam Isola,[3] Franca Soldano,[3] Barbara Bruno,[2] Maria Teresa van Lint,[2] Anna Paola Iori,[4] Stella Santarone,[5] Ferdinando Porretto,[6] Pietro Pioltelli,[7] Giuseppe Visani,[8] Pasquale Iacopino,[9] Renato Fanin,[1] and Alberto Bosi[10] on behalf of the GITMO
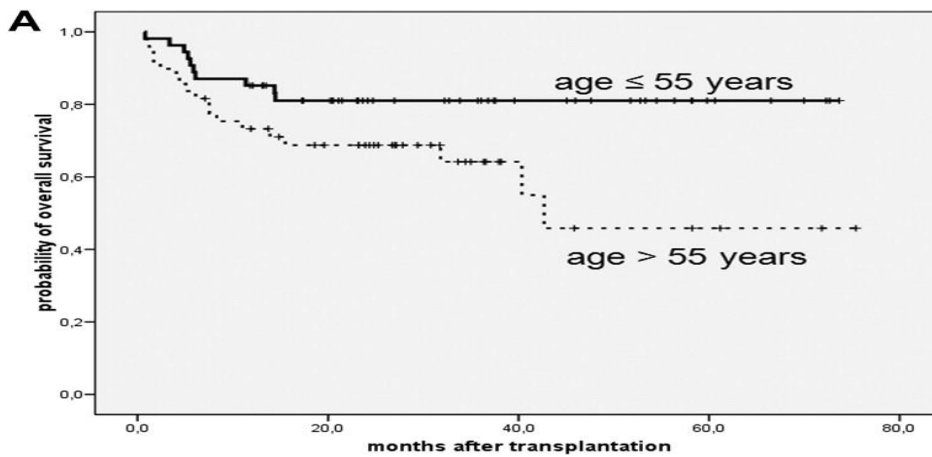
[1]Division of Hematology and Cellular Therapies Unit 'Carlo Melzi', Dept. of Morphological and Medical Research, University of Udine; [2]II Hematology Division, San Martino Hospital, Genoa; [3]Statistics Institute, Dept. of Morphological and Medical Research, University of Udine; [4]Hematology Division, 'La Sapienza' University, Rome; [5]Hematology Department, Pescara Hospital, Oncohematology Unit; [6]'La Maddalena' Hospital, Palermo; [7]Internal Medicine and Hematology Division, 'S. Gerardo de' Tintori' Hospital, Monza; [8]Division of Hematology, Pesaro Hospital; [9]Division of Hematology, Reggio Calabria Hospital and [10]Hematology Division, Azienda Ospedaliera Careggi, University of Florence, Italy

MULTIVARIATE ANALYSIS ON NRM and OS DATA

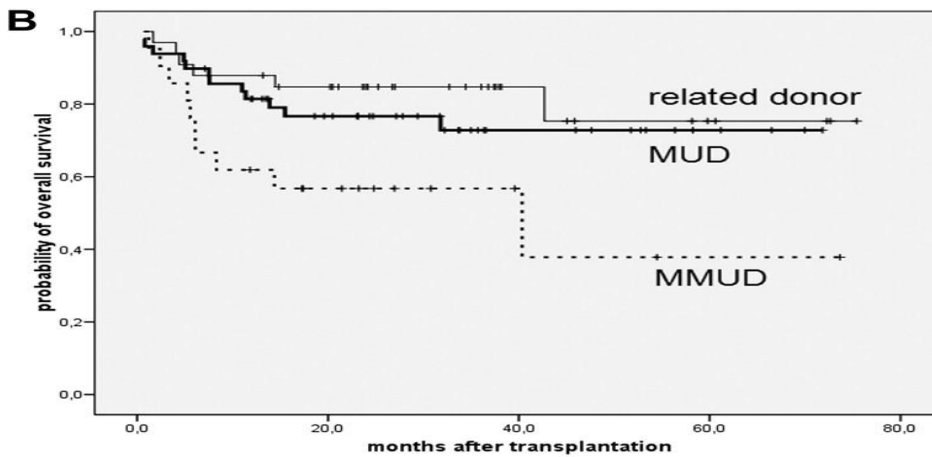| Factor	NRM			OS		
	HR	95%CI	p	HR	95%CI	p
Years of SCT <1995 1996-2000 >2001	1 0.24 0.32	0.08-0.75 0.12-0.81 0.12-0.81	 **0.014** **0.016**	--- --- ---	--- --- ---	--- --- ---
Time from dx to SCT **Modeled as continuous**	1.01	1.01-1.02	**0.001**	---	---	---
Donor **Sibling matched** **Unrelated or missmatched**	1 2.71	 1.25-5.88	 **0.012**	--- ---	--- ---	--- ---
Source of stem cell **Bone marrow** **Peripheral blood**	---- ----	--- ---	--- ---	1 0.53	 0.30-0.96	 **0.036**

ALLOGENEIC SCT AFTER REDUCED-INTENSITY CONDITIONING

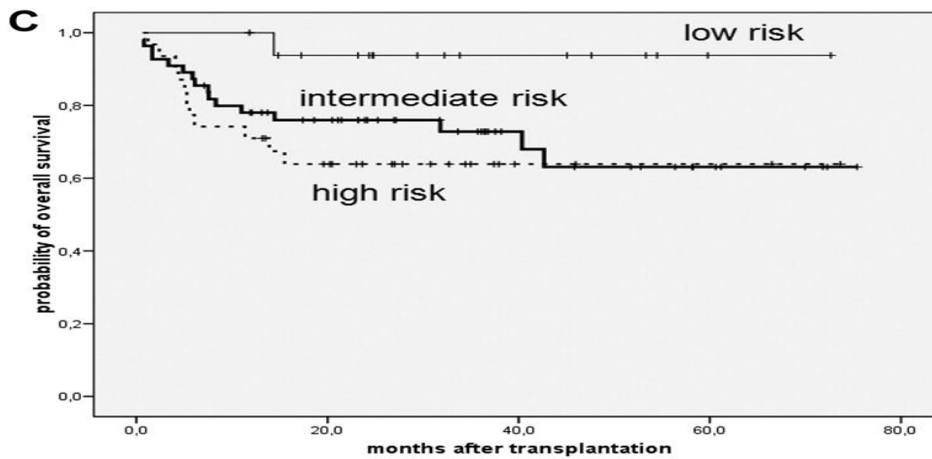|	Rondelli 2005	Merup 2006	Synder 2006	Bacigalupo 2009	Kroger 2009
N° pts	21	10	9	46	104
Median age	54 (27-68)	40 (5-63)	54 (46-68)	55 (32-68)	55 (32-68)
Conditioning	Flu-bu Thiotepa-cy Flu-melphalan Flu-TBI	Flu-bu Flu-cy-melphalan	Flu-melphalan Flu-TBI	Thiotepa-cy± melphalan	RIC Fluda-Bu
Donor Rel/unrel	19/2	20/7	2/7	32/14	34/70
NRM	9% (1y)	29% (4y)	44% (3y)	24% (1y)	16% (1y)
3y-relapse	9% (3y)	NE	0% (3y)	19% (3y)	22% (3y)
OS	78% (2y)	70% (4y)	56% (3y)	45% (5y)	67% (5y)

Age > 55 years
Mismatched MUD donors
absence of JAK mutation

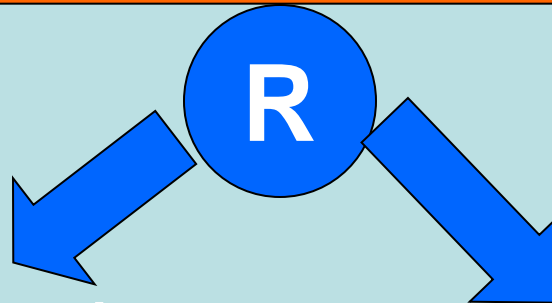**are negative predictors of OS**

Splenectomy
Lille high-risk score

are significative factors for
increase risk of relapse

Kroeger, Blood 2009

GITMO randomized phase II study

Myelofibrosis primary or post ET/PV age 18-70 Intermediate-high Lille score or low with constitutional symptoms or circulating blasts > 1%

HLA-id sibling donor or HLA unrelated donor (one allele mismatched in class 1 accepted)

R

**Fludarabine 180 mg/mq
Busulfan 8 mg/mq
ATG in unrelated donor**

**Fludarabine 180 mg/mq
Thiotepa 12 mg/Kg
ATG in unrelated donor**