



**GIORNATA MONDIALE
SINDROMI MIELODISPLASTICHE**

IV FORUM NAZIONALE **AIPaSiM**

**MIELODISPLASIE:
DAL PERCHÉ E DAL COME ALLA TERAPIA
PERSONALIZZATA**

FIRENZE, 25 OTTOBRE 2019 · AIL FIRENZE - Piazza Giovanni Meyer, 2 - Firenze

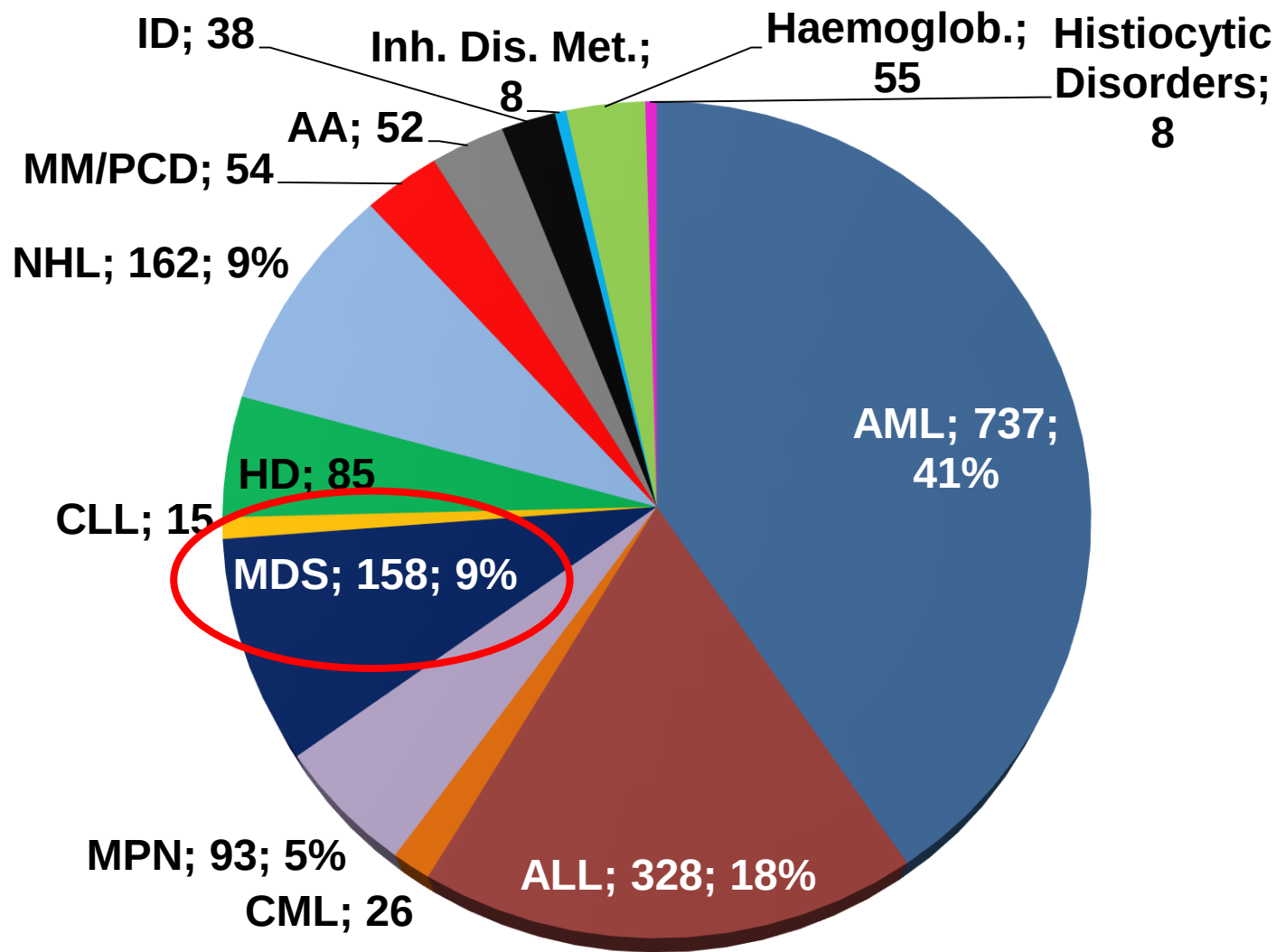
Il Trapianto: opzione di cura per i pazienti con sindromi mielodisplastiche



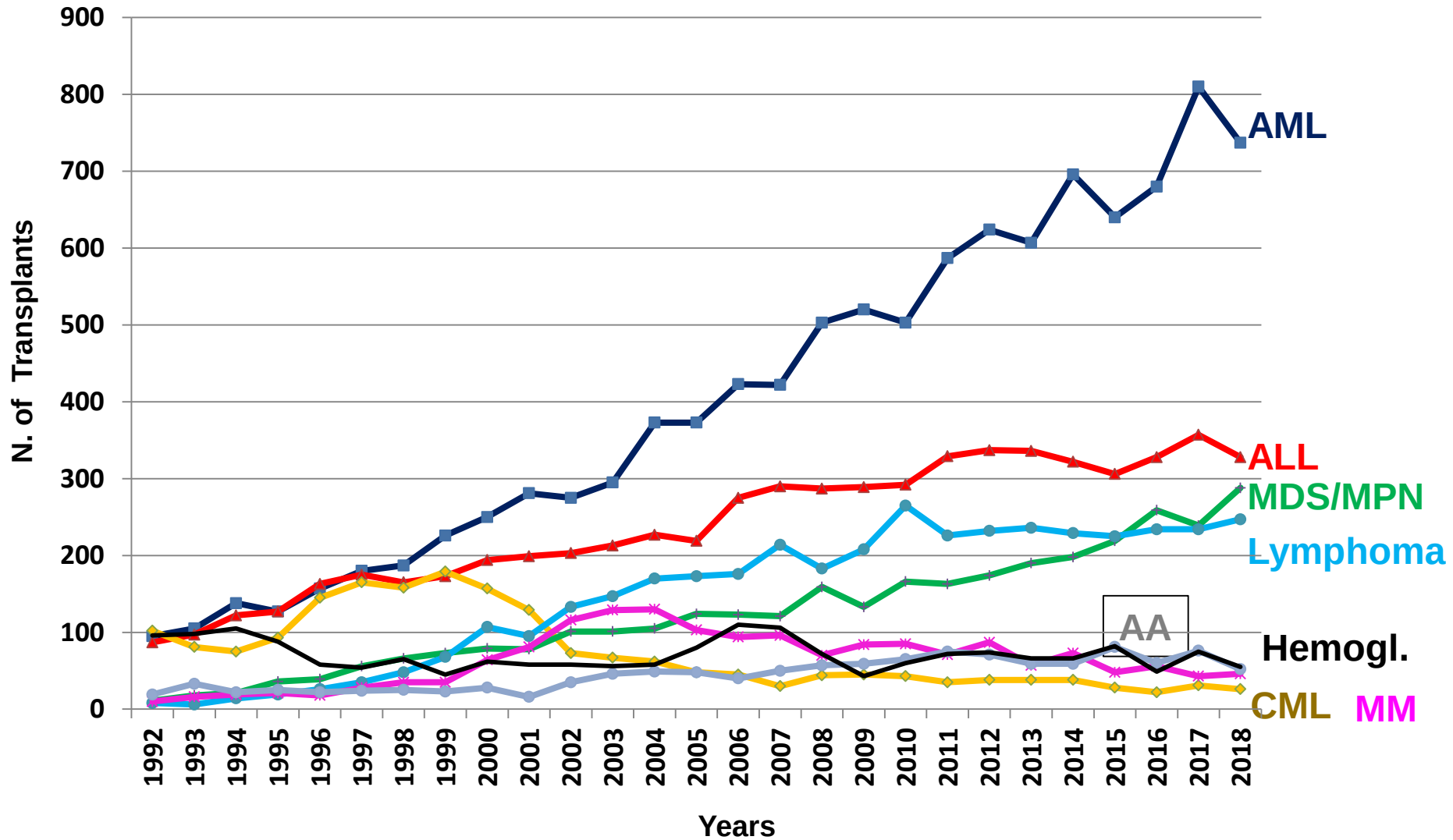
OSPEDALE POLICLINICO SAN MARTINO

Sistema Sanitario Regione Liguria
Istituto di Ricovero e Cura a Carattere Scientifico

GITMO: Trapianto Allogeneico report 2018



Allogeneic Transplants – Indications over the years



ALLOGENEIC HSCT IN MDS

- Chi ?
- Quando ?
- Avrò un donatore ?
- Devo fare la 5 Azacitidina prima del trapianto ?
- Che possibilità ho ?
- Quale è il primo passo ?

Il trapianto nelle MDS.

Domande

Chi ?	
Quando ?	
Avrò un donatore ?	
Devo fare la 5 Azacitidina prima ?	
Quali risultati	
Quale è il primo passo ?	

Revised International Prognostic Scoring System (IPSS-R) for Myelodysplastic Syndromes Risk Assessment Calculator

Variables (units) [usual range]

Value

Hemoglobin (g/dL) [4-20]

A possible conversion for Hb values:

10 g/dL = 6.2 mmol/L, 8 g/dL = 5.0 mmol/L

Absolute Neutrophil Count ($\times 10^9/L$) [0-15]

Platelets ($\times 10^9/L$) [0-2000]

Bone Marrow Blasts (percent) [0-30]

Cytogenetic Category

☐ Very Good ☐ Good ☐ Intermediate ☐ Poor ☐ Very Poor

IPSS-R SCORE

IPSS-R CATEGORY

RISK
CATEGORY

RISK SCORE

Very Low

≤ 1.5

Low

$> 1.5 - 3$

Intermediate

$> 3 - 4.5$

High

$> 4.5 - 6$

Very High

> 6

TMO

Transplantation policy according to IPSS vs. IPSS-R

	<i>IPSS-based policy*</i>	<i>IPSS-R</i>	<i>%</i>	<i>IPSS-R based policy **</i>
IPSS Low	<i>Delayed</i>	Very low	37	<i>Delayed</i>
		Low	50	<i>Delayed</i>
		Intermediate	13	<i>Immediate</i>
		High	-	
IPSS Intermediate-1	<i>Delayed</i>	Very low / Low	48	<i>Delayed</i>
		Intermediate	40	<i>Immediate</i>
		High	11	<i>Immediate</i>
		Very high	1	<i>immediate</i>

* Cutler CS et al. Blood 2004

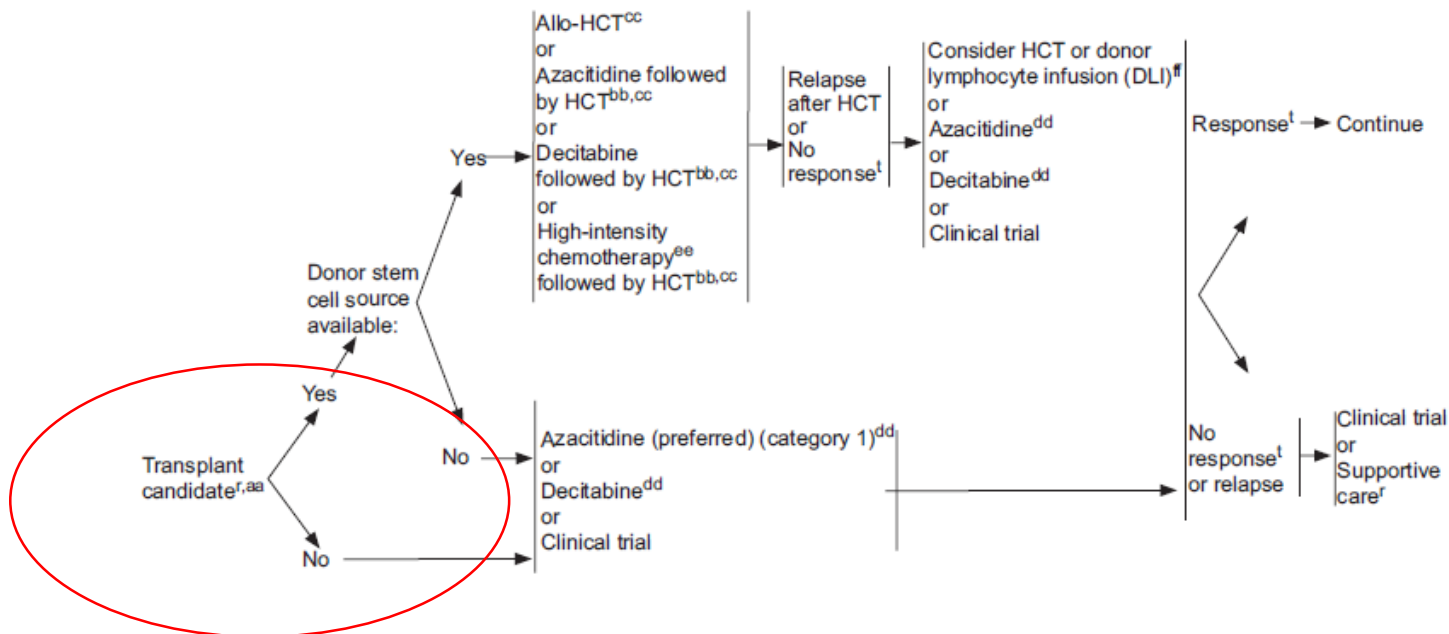
** Della Porta MG et al. Leukemia. 2017

NCCN MDS 2017 guidelines

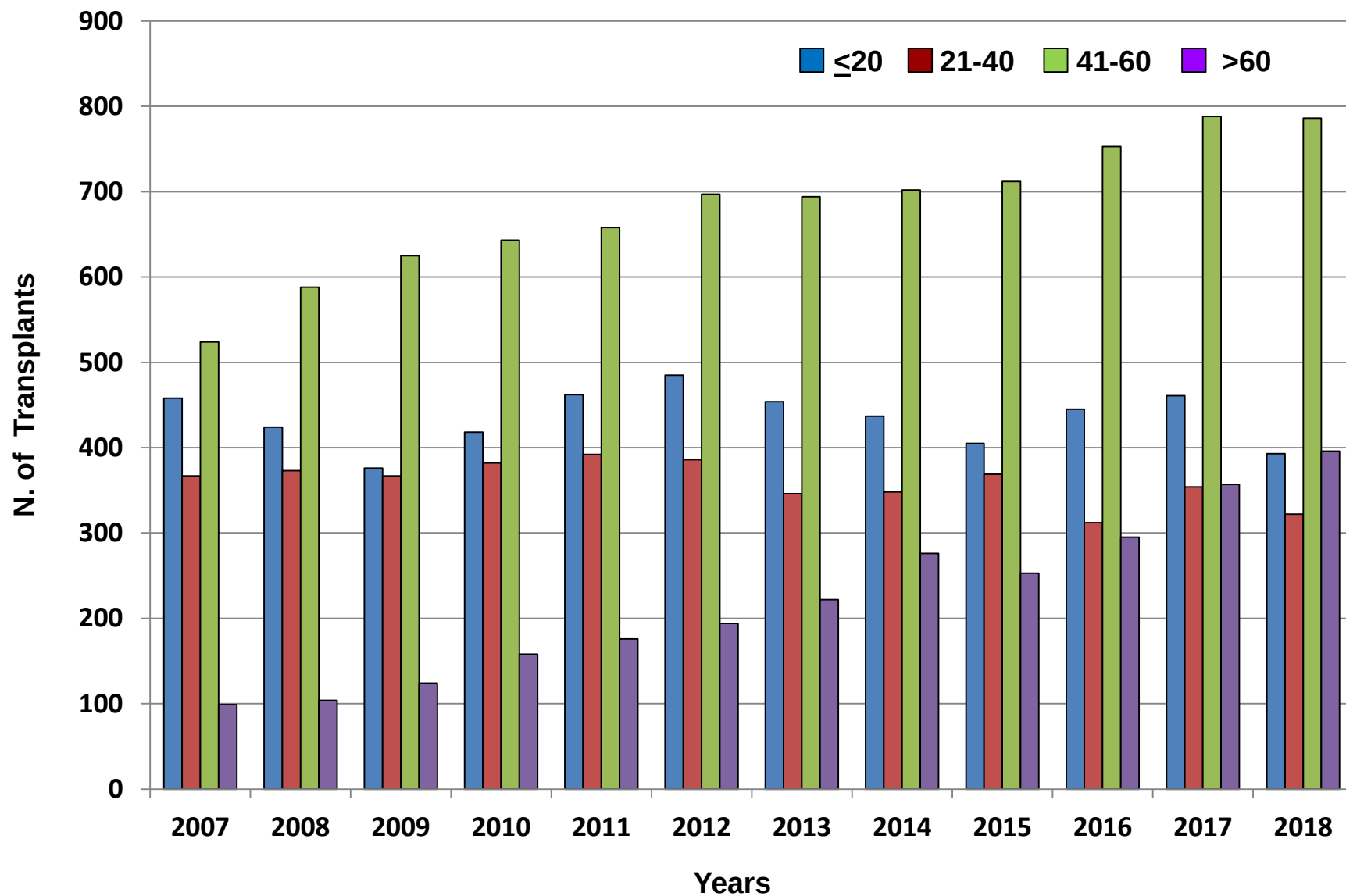
PROGNOSTIC CATEGORY^o

IPSS: Intermediate-2, High
IPSS-R: Intermediate,^p High, Very High
WPSS: High, Very High

TREATMENT



Allogeneic Transplants – Patient age at transplantation

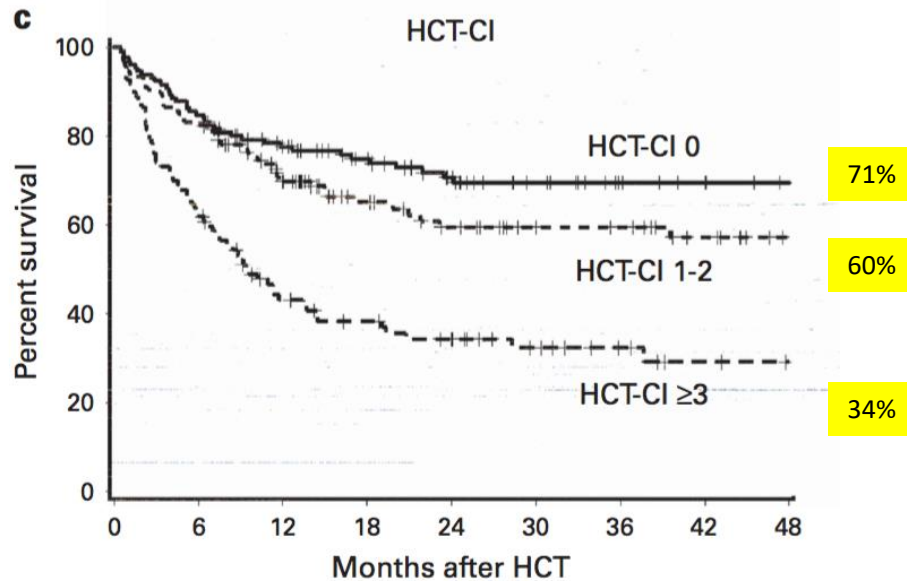
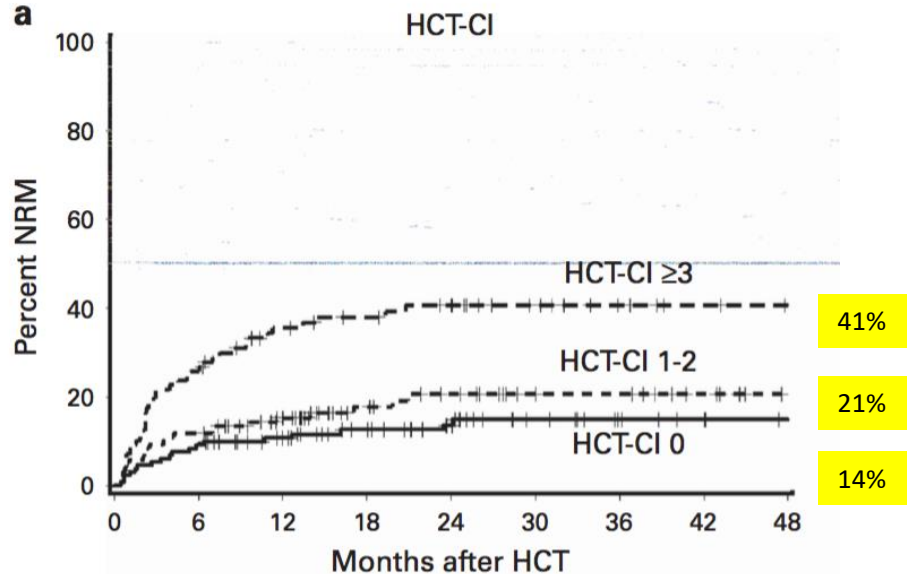


**L'indicazione al trapianto per
TUTTI I PAZIENTI
è necessariamente accompagnata dalla valutazione
del Comorbidity Index (HCT-CI)**

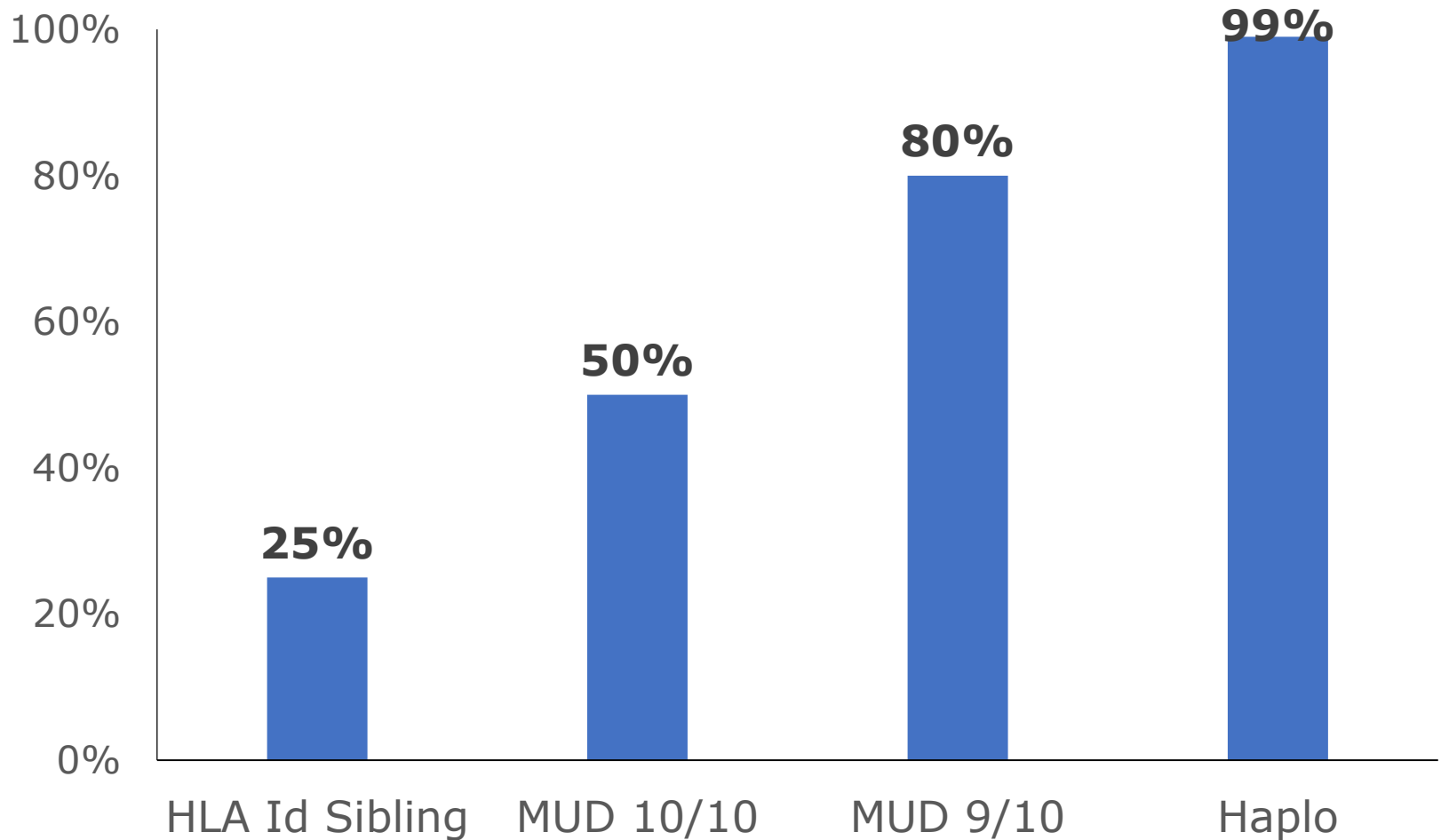
Table 1. HCT-CI

Comorbidities	HCT-CI scores
Arrhythmia	1
Cardiovascular comorbidity	1
Inflammatory bowel disease	1
Diabetes or steroid-induced hyperglycemia	1
Cerebrovascular disease	1
Psychiatric disorder	1
Mild hepatic comorbidity	1
Obesity	1
Infection	1
Rheumatologic comorbidity	2
Peptic ulcer	2
Renal comorbidity	2
Moderate pulmonary comorbidity	2
Prior malignancy	3
Heart valve disease	3
Moderate/severe hepatic comorbidity	3
Severe pulmonary comorbidity	3
<i>Total score = _____</i>	

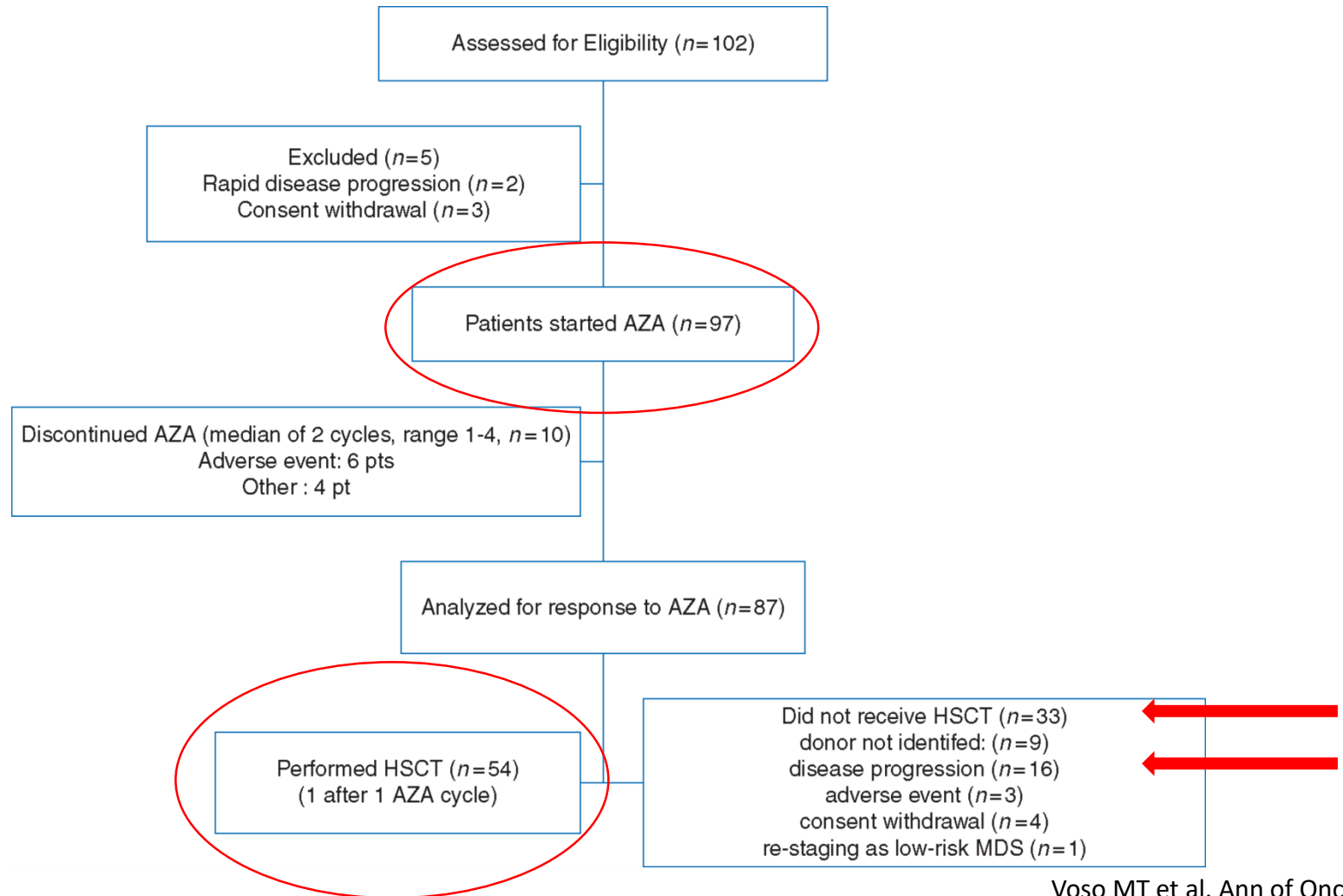
CI-INDEX AND OUTCOME



Probability to Find a Donor

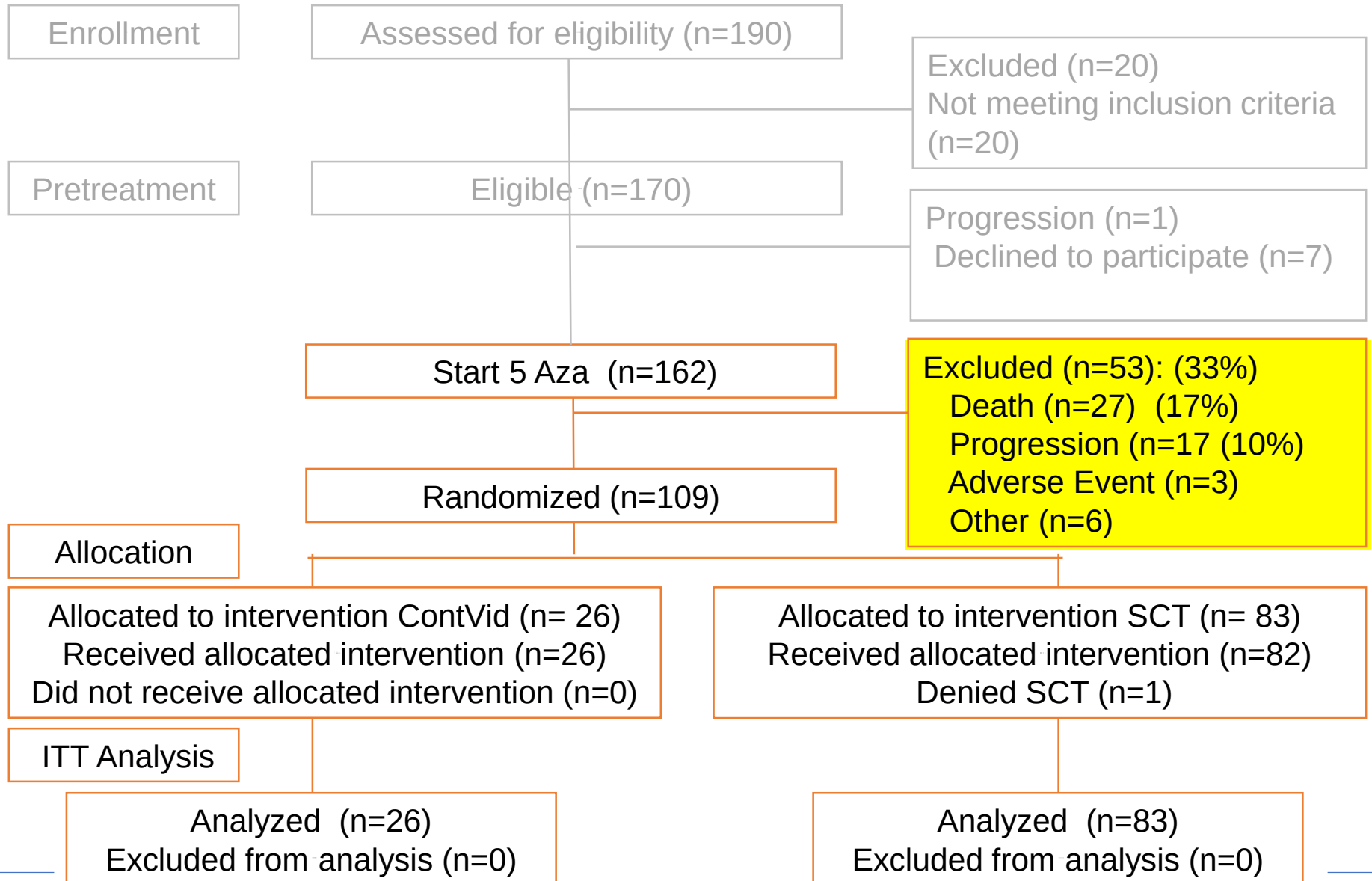


Feasibility of allogeneic stem-cell transplantation after azacitidine bridge in higher-risk myelodysplastic syndromes and low blast count acute myeloid leukemia: results of the BMT-AZA prospective study

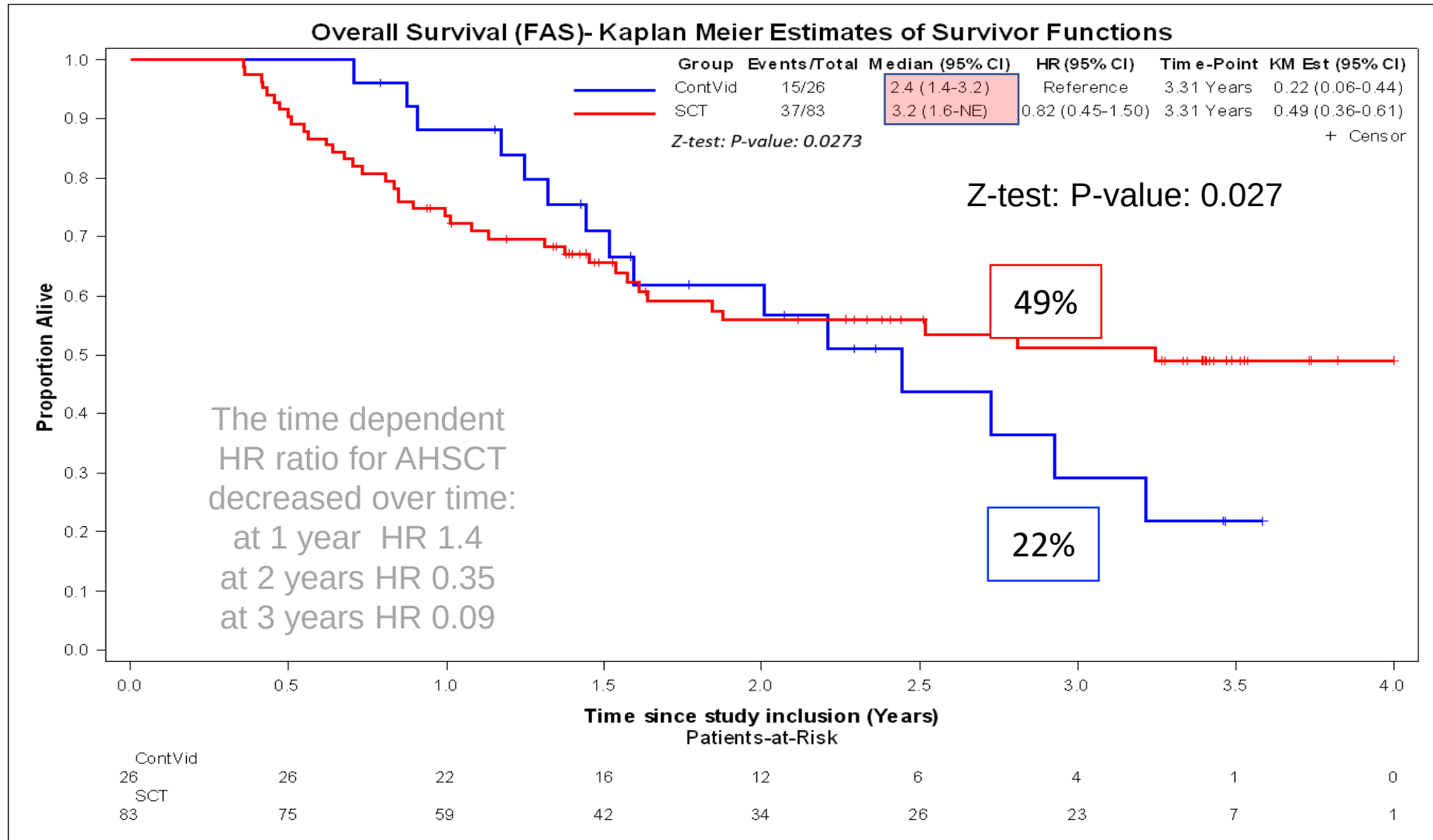


CONSORT Flow Diagramm

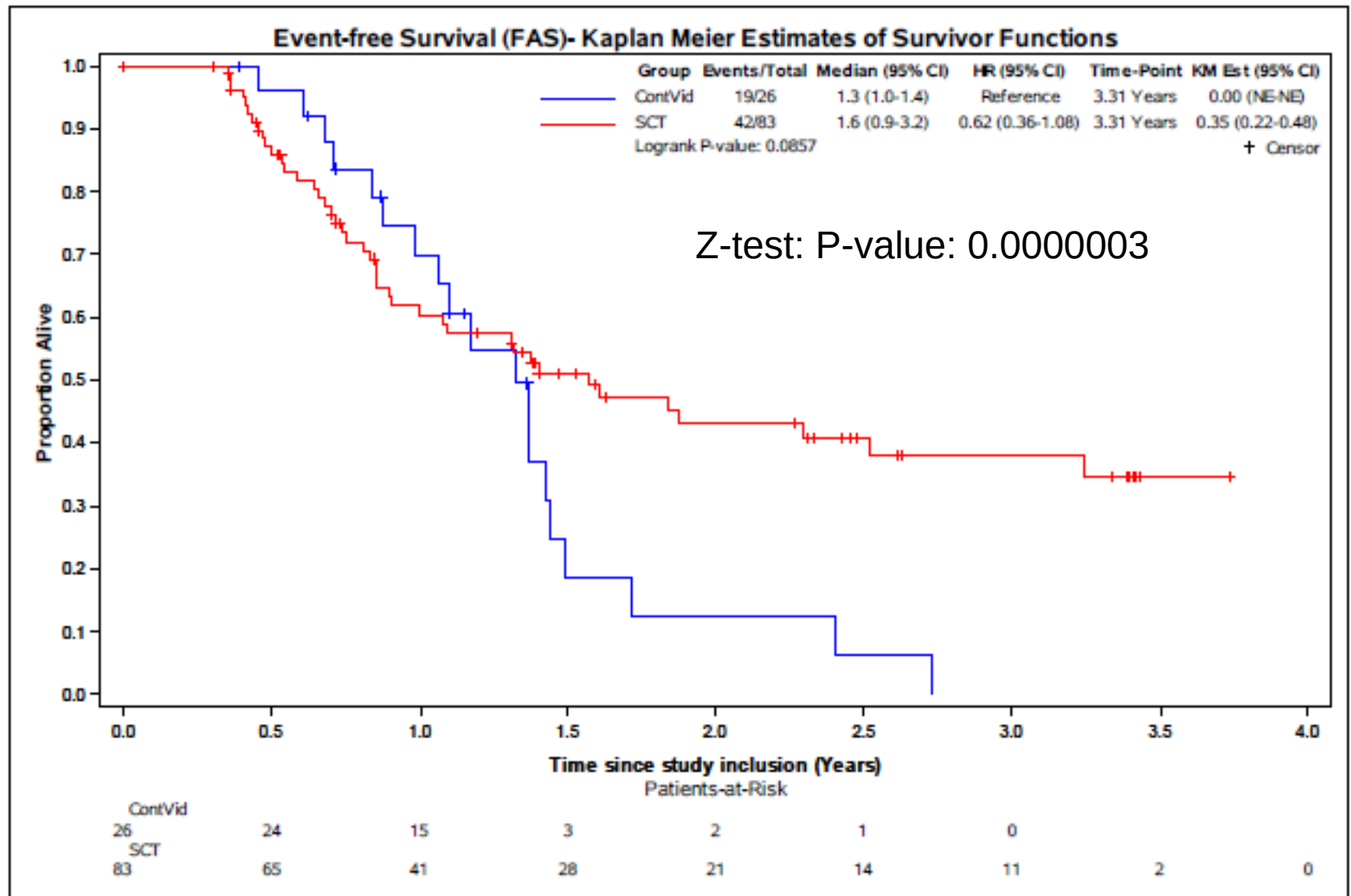
Between June 2011 and November 2016 190 patients with a median age of 63 years from 14 German centers were enrolled



VidazaAllo Study: Overall Survival



VidazaAllo Study: Event-free Survival



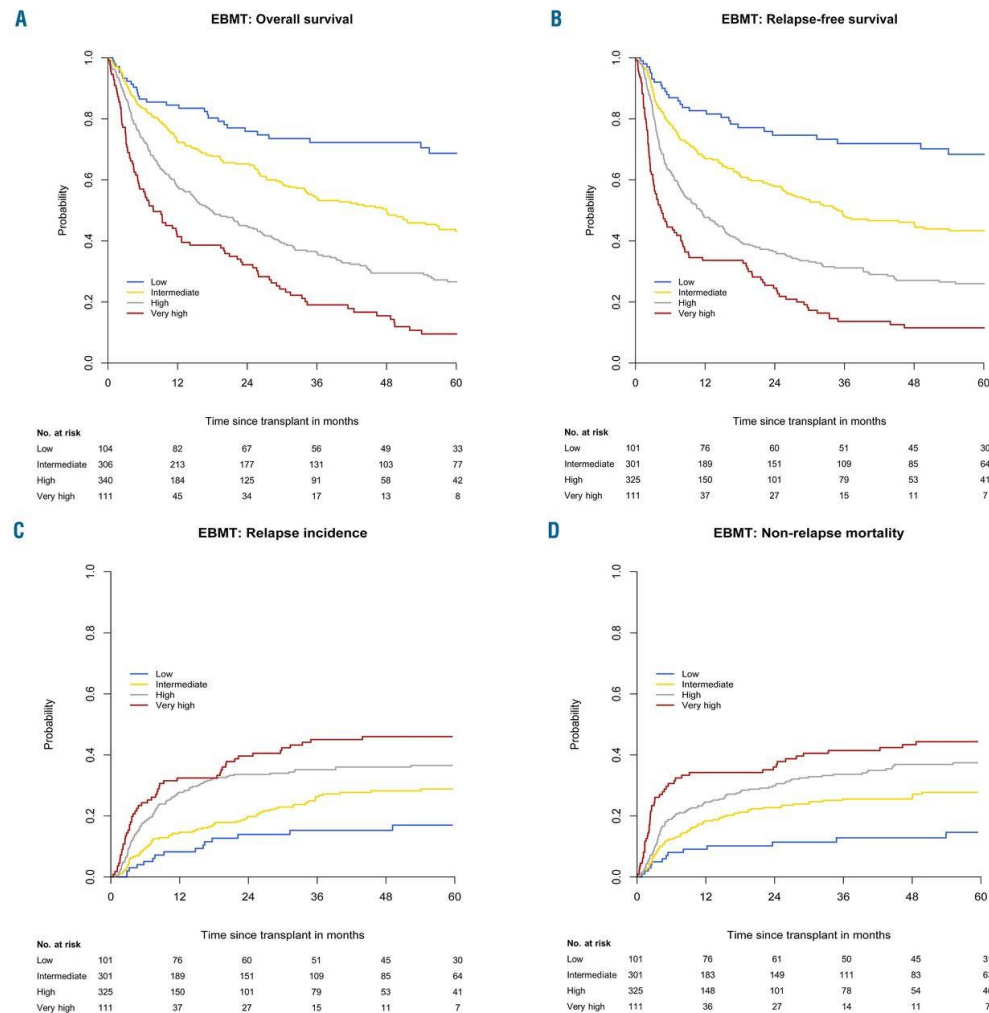
Multivariate analysis on overall survival showing seven independent risk factors after stepwise selection using a Cox proportional hazards model.

Factor	HR (95% CI)	P	Score value
Age at transplant, years		<0.001	
< 50	reference		
≥ 50	1.71 (1.39-2.09)		2
Blood blasts at transplant, %		0.03	
≤ 1	reference		
> 1	1.39 (1.03-1.86)		1
Platelets at transplant, x10 ⁹ /L		0.001	
> 50	reference		
≤ 50	1.46 (1.17-1.82)		1
Donor type		<0.001	
HLA-identical sibling	reference		
matched unrelated	1.39 (1.13-1.71)		1
Cytogenetic risk		<0.001	
very good to poor	reference		
very poor/monosomal karyotype	1.71 (1.43-2.06)		2
Cytomegalovirus serostatus of recipient		<0.001	
negative	reference		
positive	1.39 (1.16-1.65)		1
Karnofsky index, %		<0.001	
90 to 100	reference		
< 90	1.44 (1.20-1.72)		1

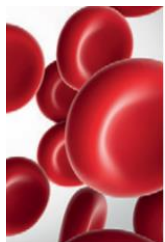
HR: hazard ratio; CI: confidence interval.

Nico Gagelmann et al. Haematologica 2019;104:929-936

Kaplan-Meier analysis of survival following allogeneic stem cell transplantation in patients with myelodysplastic syndrome stratified according to each risk group of the EBMT transplant-specific risk score



Nico Gagelmann et al. Haematologica 2019;104:929-936



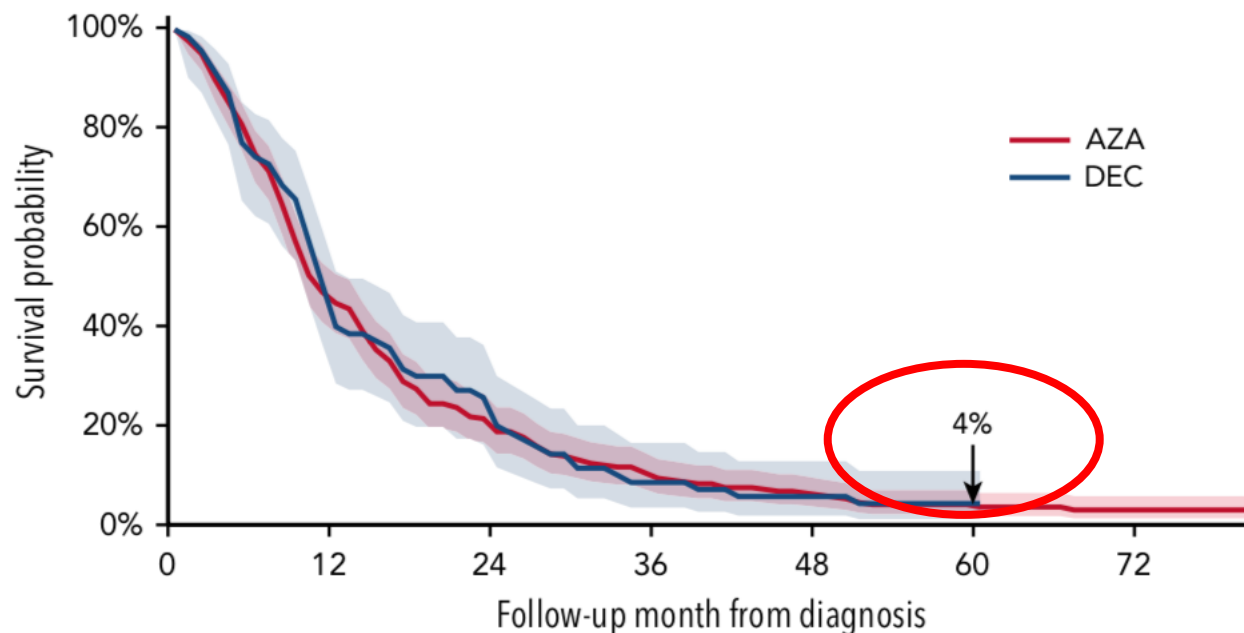
blood®

Letters to Blood

TO THE EDITOR:

Long-term survival of older patients with MDS treated with HMA therapy without subsequent stem cell transplantation

Amer M. Zeidan,^{1,2} Maximilian Stahl,^{1,2} Xin Hu,² Rong Wang,^{2,3} Scott F. Huntington,^{1,2} Nikolai A. Podoltsev,^{1,2} Steven D. Gore,^{1,2} Xiaomei Ma,^{2,3} and Amy J. Davidoff^{2,4}



N= 336

RAEB

Diagnosis 2006-2009

Age 70- >80

GENOVA MDS TRANSPLANT

Pazienti n = 117

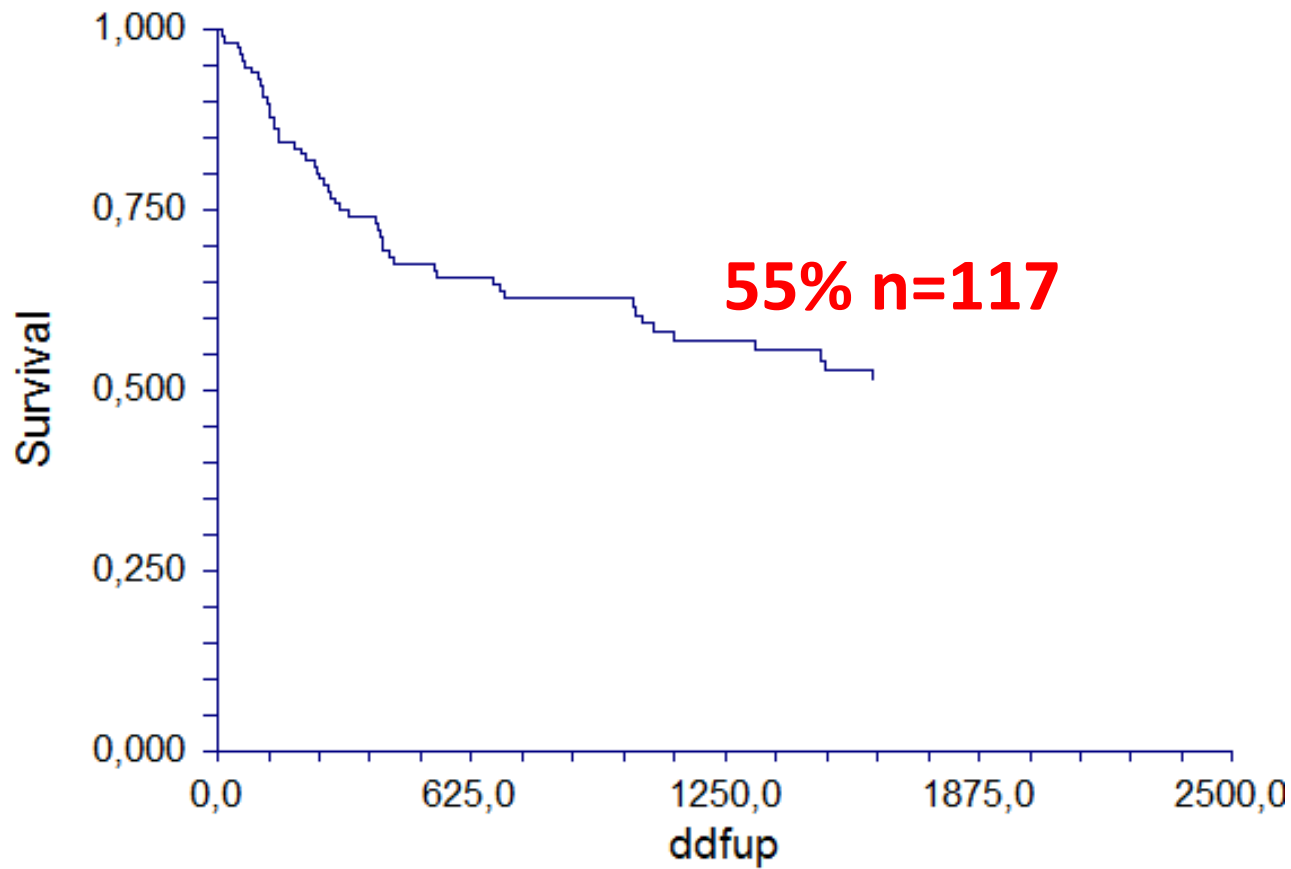
Età Mediana = 56 (18-70) yy

Follow up mediano = 1566 (210-3224) giorni

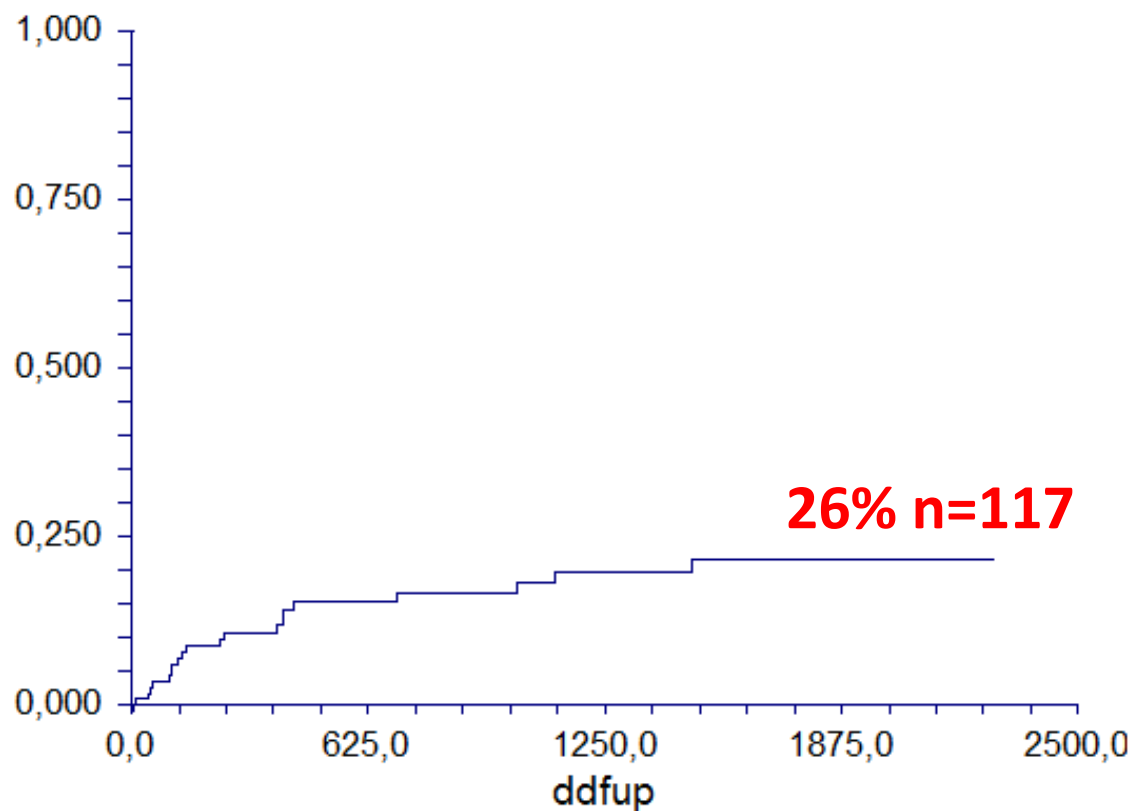
Anno del trapianto:

da Gennaio 2010 a Luglio 2018

MDS GE SOPRAVVIVENZA GLOBALE



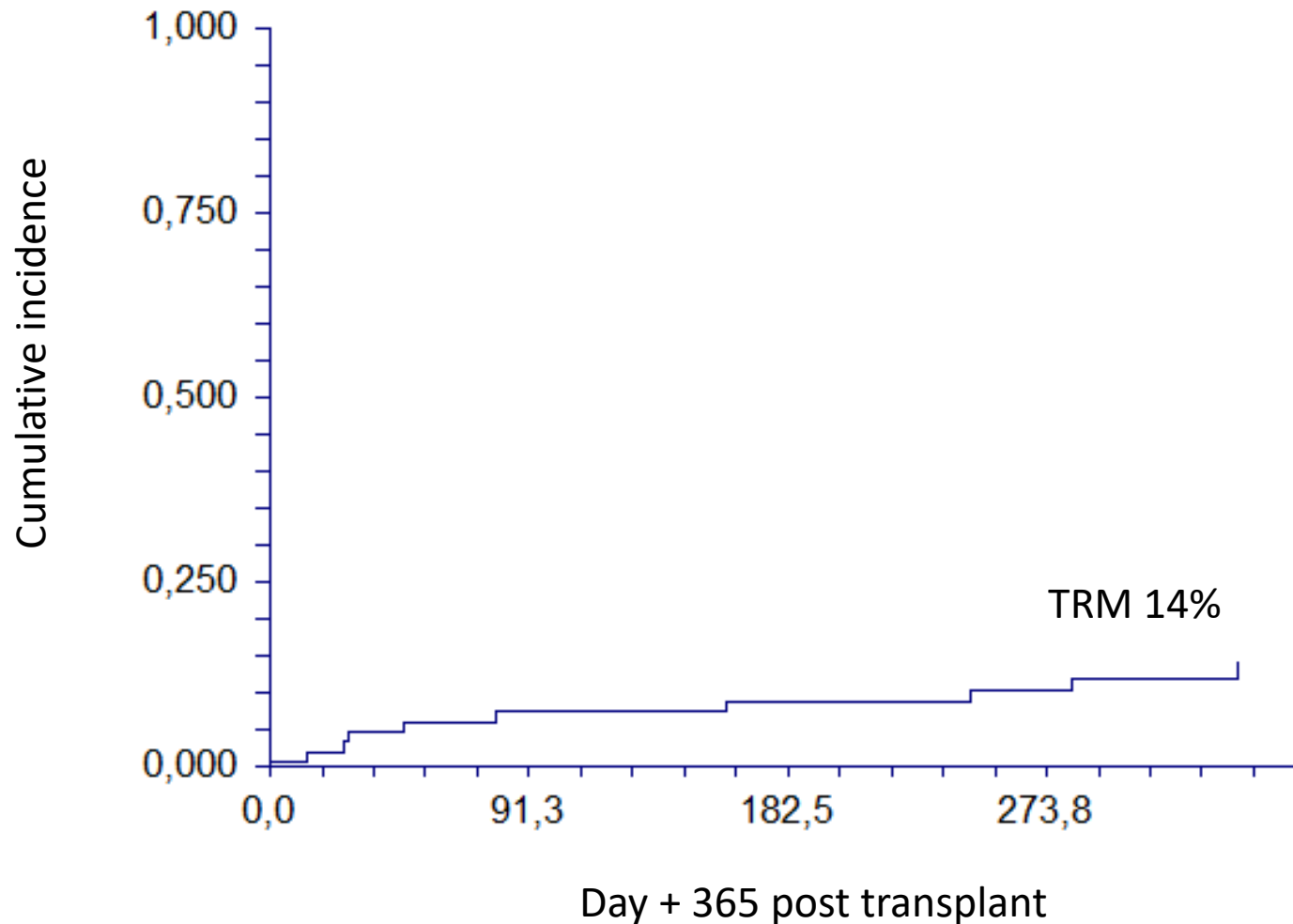
MDS GE MORTALITA' TRAPIANTOLOGICA



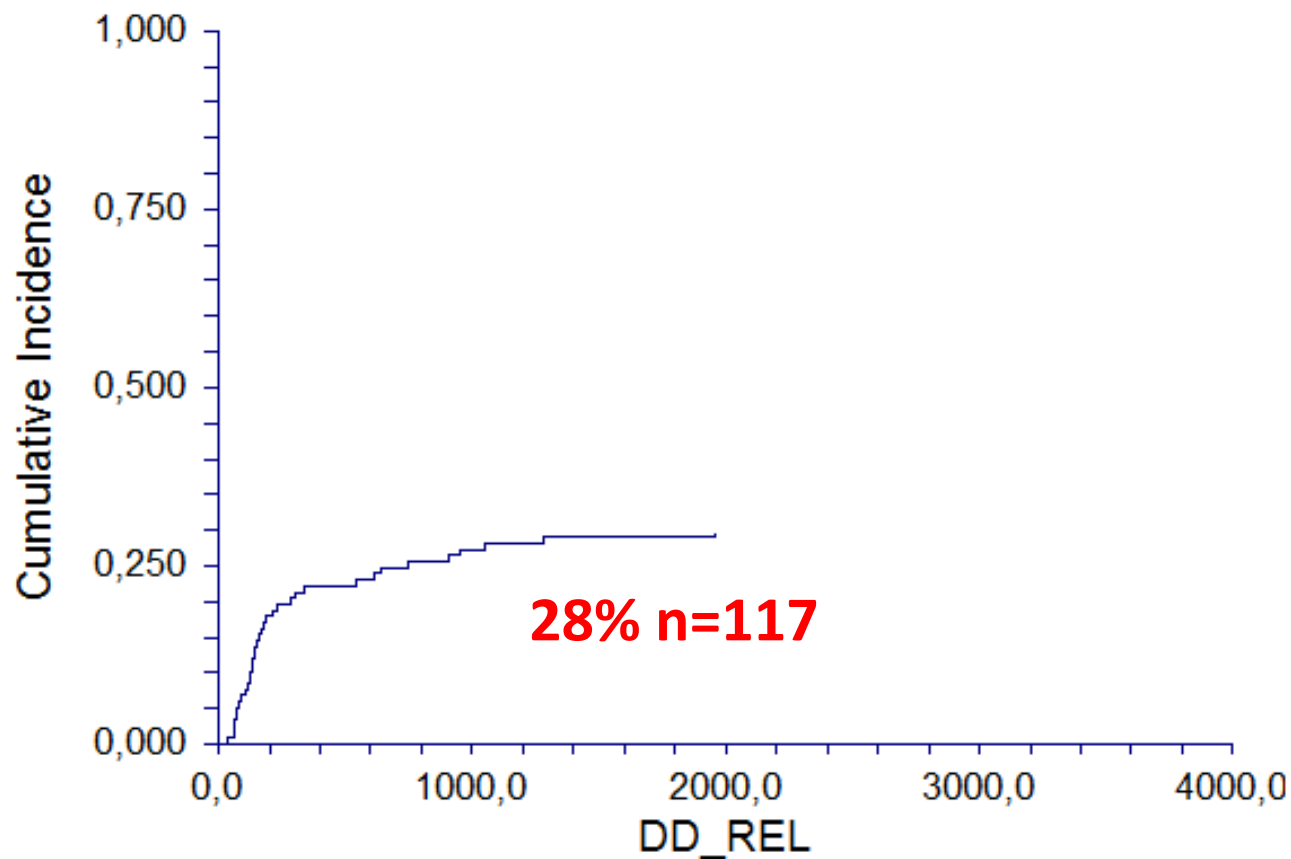
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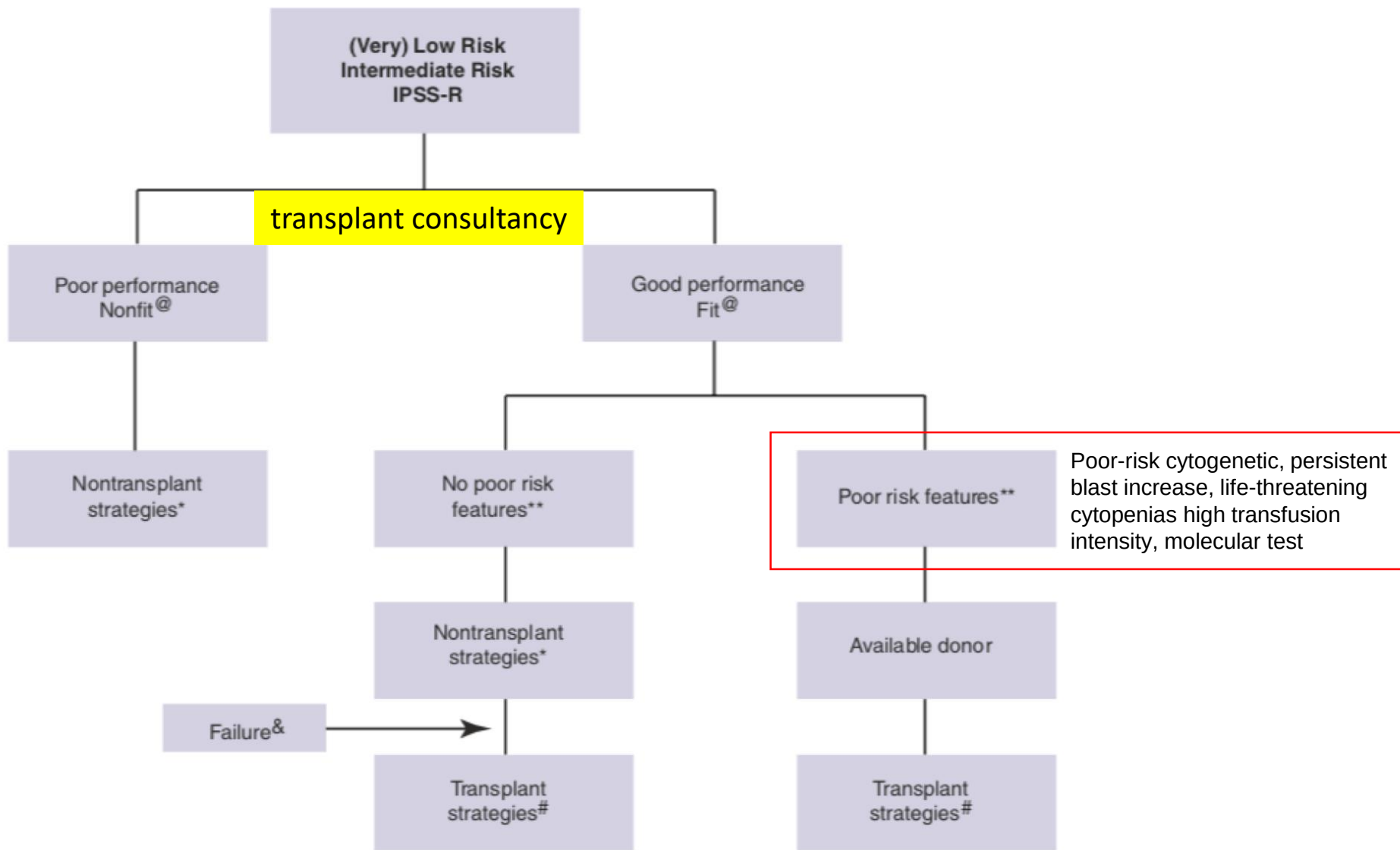
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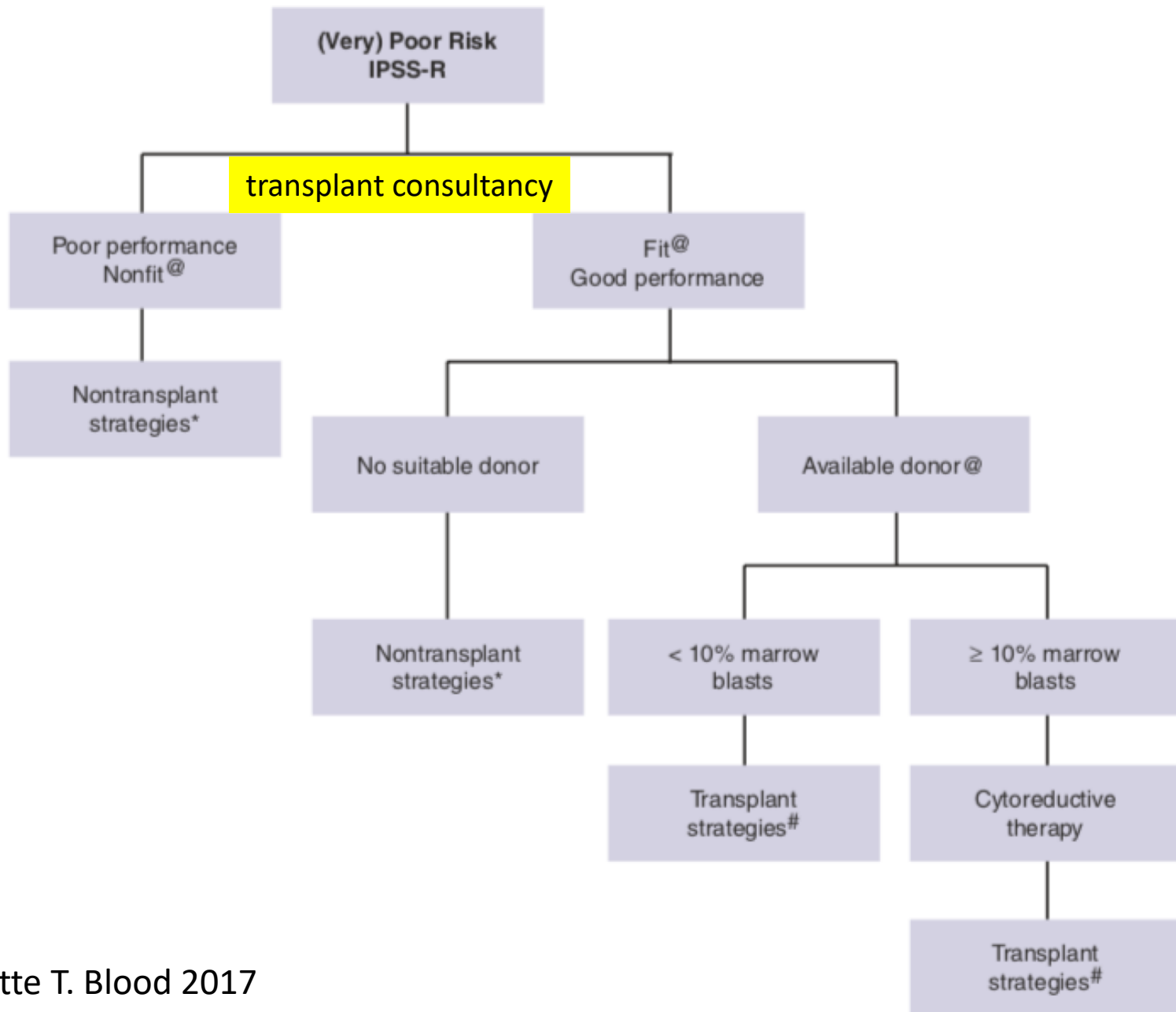
TRM for patients allografted GE SAN MARTINO year 2018 N=74 day + 365



MDS GE RECIDIVA DI MALATTIA







Il trapianto nelle MDS.

Domande – tentativo risposte

Chi ?	Rischi Intermedio , Alto e molto alto. Rischio basso pazienti giovani o con fattori di rischio. Fino ai 70-75 con valutazione delle comorbidità
Quando ?	Alla diagnosi oi alla progressione
Avrò un donatore ?	90%
Devo fare la 5 Azacitidina prima ?	Se possibile no (materia di discussione)
Quali risultati	Possibilità di guarigione variabile ma in media del 50%
Quale è il primo passo ?	Visita trapiantologica alla diagnosi

Il trapianto nelle MDS.

Domande – tentativo risposte

Chi ?	Rischi Intermedio , Alto e molto alto. Rischio basso pazienti giovani o con fattori di rischio. Fino ai 70-75 con valutazione delle comorbidità
Quando ?	Alla diagnosi oi alla progressione
Avrò un donatore ?	90%
Devo fare la 5 altre terapie prima del trapianto?	Se possibile no (materia di discussione)
Quali risultati	Possibilità di guarigione variabile ma in media del 50%
Quale è il primo passo ?	Visita trapiantologica alla diagnosi

Grazie per la vostra
gentile attenzione



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