MA CHI È GUARITO - nella LAM - HA DI SOLITO FATTO L'ALLOTRAPIANTO?

RENATO FANIN

Disclosures of Name Surname

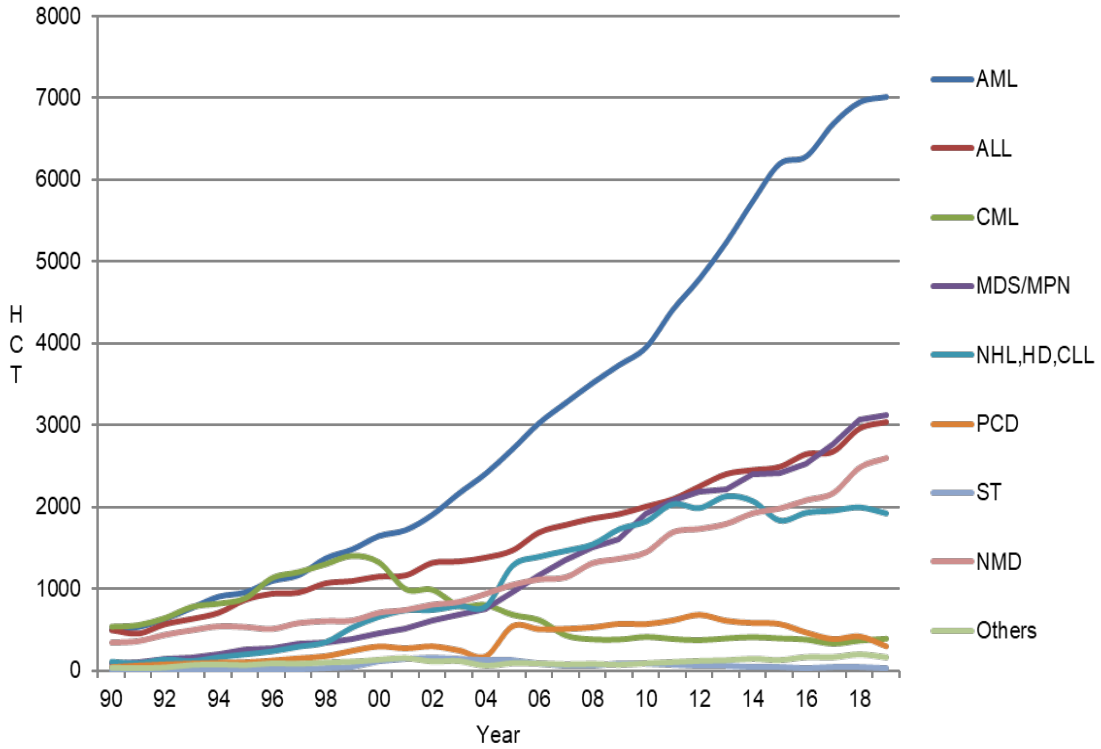
Company name	Research support	Employee	Consultant	Stockholder	Speakers bureau	Advisory board	Other

NONE

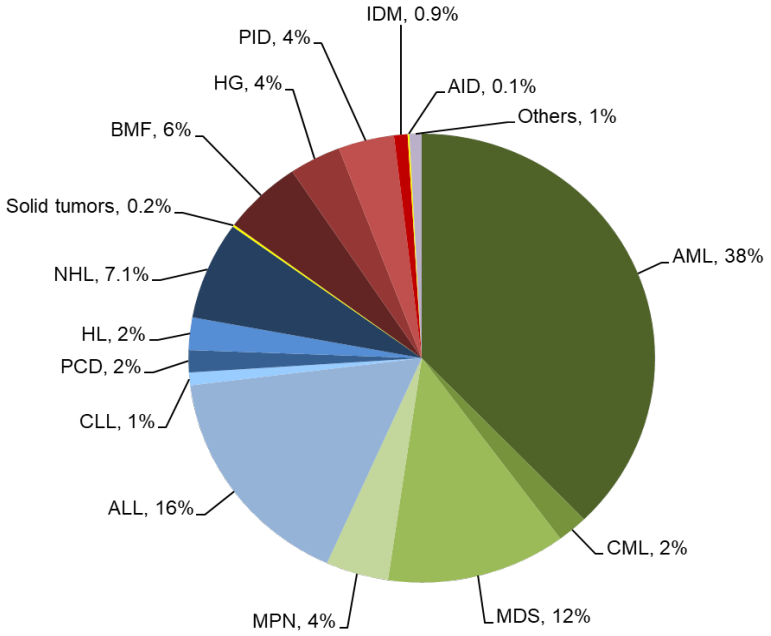
AGENDA

1) I numeri del Trapianto Allogenico nei Registri, nelle LAM
2) Indicazioni al trapianto nelle LAM nel 2021
3) Miglioramento della performance dell' Allo-SCT
4) Le LAM che possono guarire senza il trapianto allogenico

HCT activity in Europe 1990-2019: main indication - allogeneic

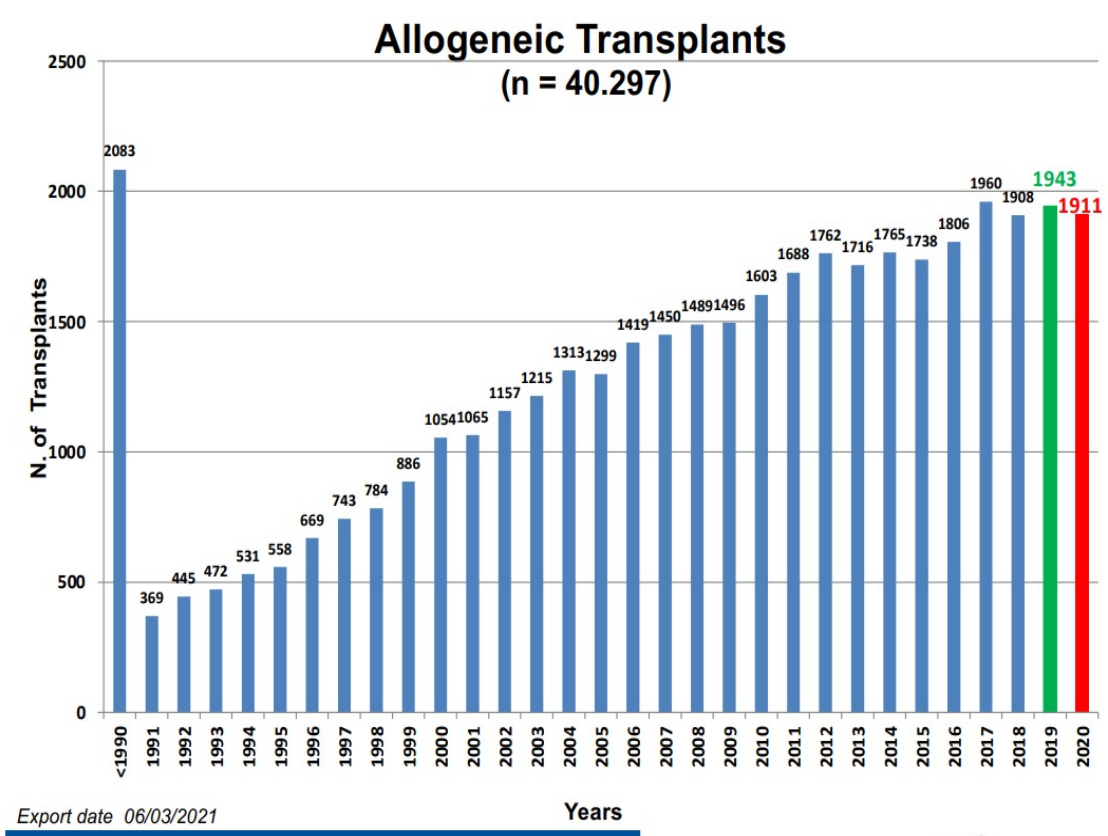


Allogeneic HCT in Europe 2019: 1st HCT



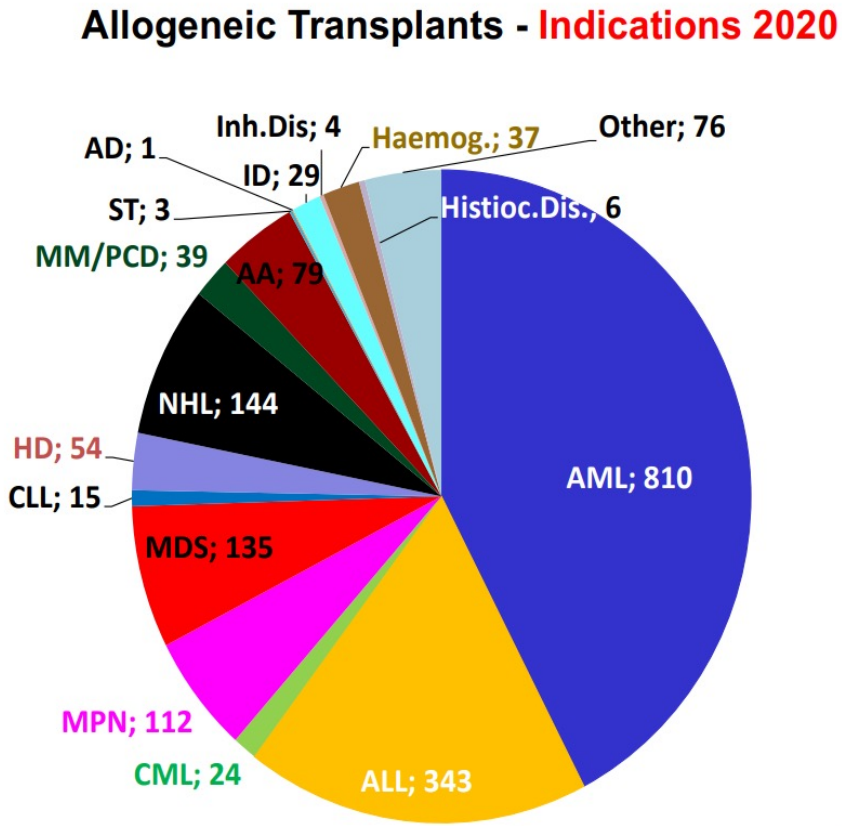
Passweg et al. Bone Marrow Transplant. 2021 Jul;56(7):1651-1664

GITMO SURVEY 2020



DA VITA NASCE VITA: PROMUOVERE LA DONAZIONE DI CELLULE STAMINALI EMOPOIETICHE IN ITALIA

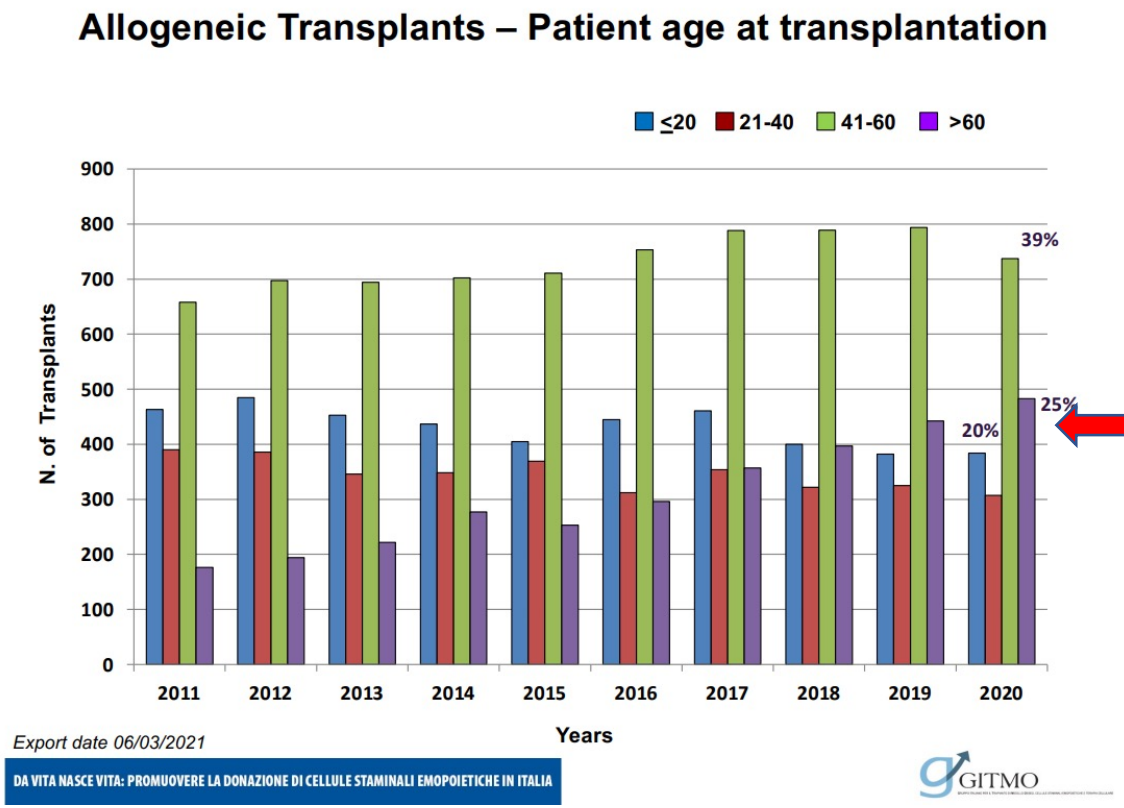
GITMO

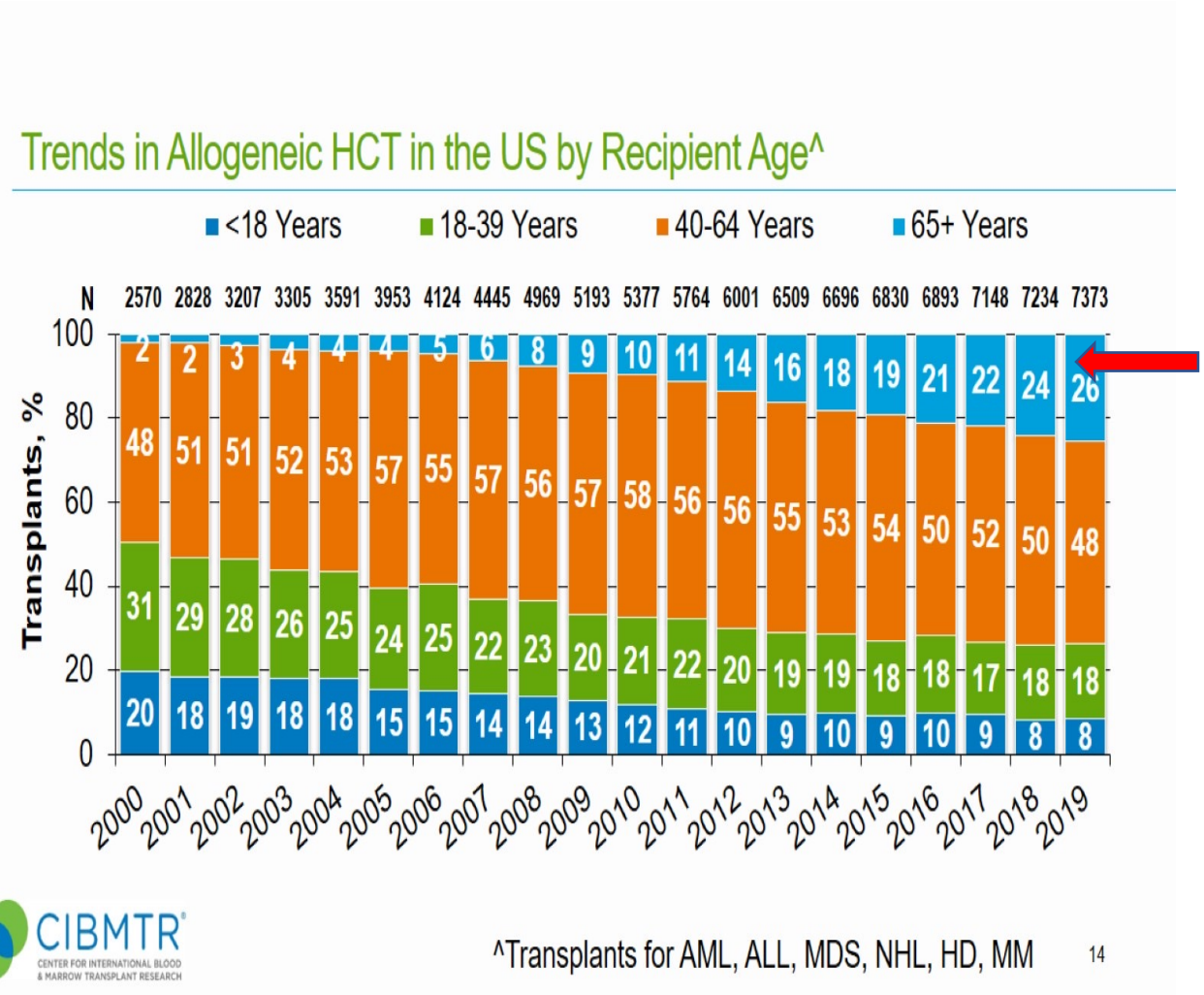


DA VITA NASCE VITA: PROMUOVERE LA DONAZIONE DI CELLULE STAMINALI EMOPOIETICHE IN ITALIA

GITMO

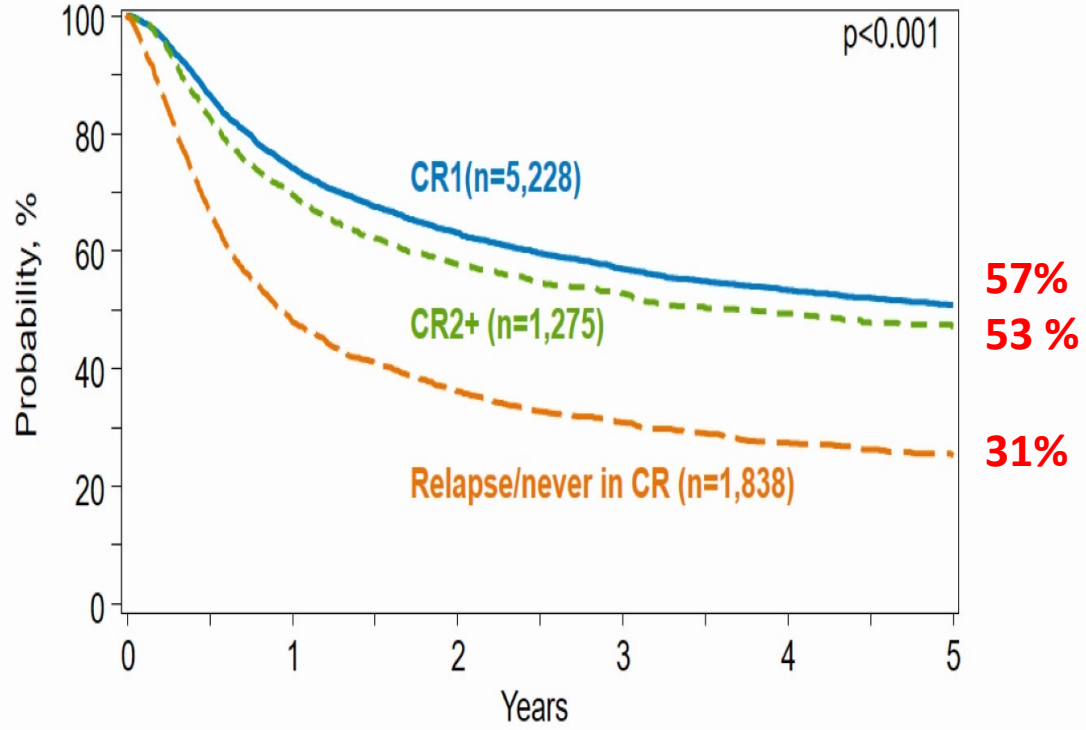
ALLOGENEIC TRANSPLANT BY RECIPIENT AGE





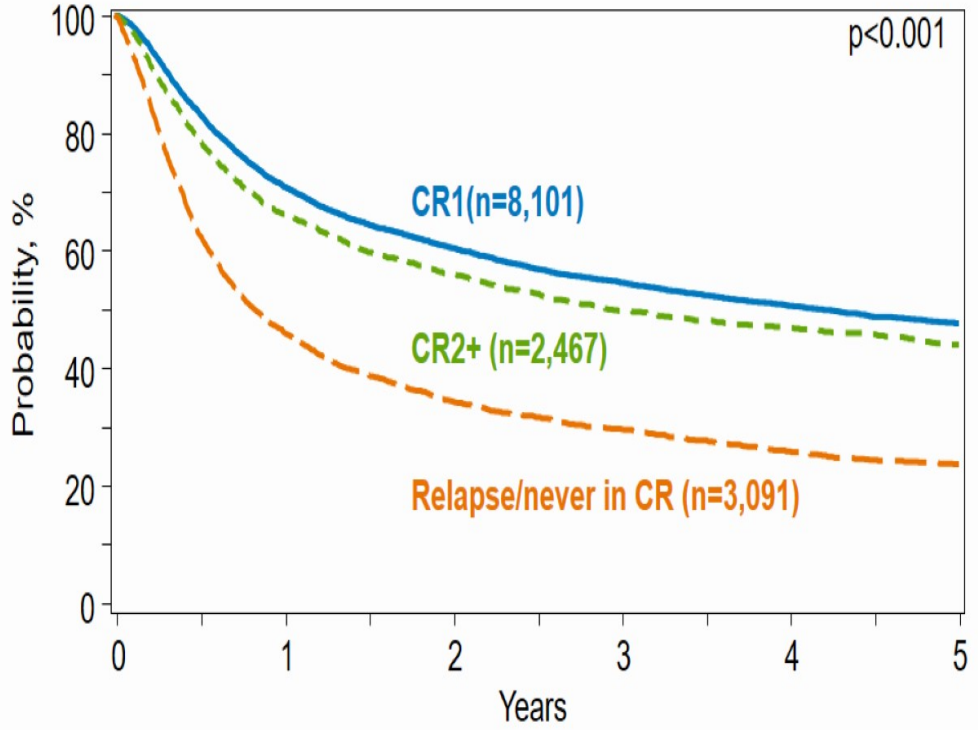
OUTCOME OF HEMOPOIETIC STEM CELL TRANSPLANT IN US SURVEY 2020

Survival after Matched Related Donor HCT for Acute Myelogenous Leukemia (AML), Age ≥18 Years, in the US, 2008-2018



57%
53 %
31%

Survival after Unrelated Donor HCT for Acute Myelogenous Leukemia (AML), Age ≥18 Years, in the US, 2008-2018



55%
50%
30%

blood®
AMERICAN SOCIETY OF HEMATOLOGY
Regular Article

CLINICAL TRIALS AND OBSERVATIONS

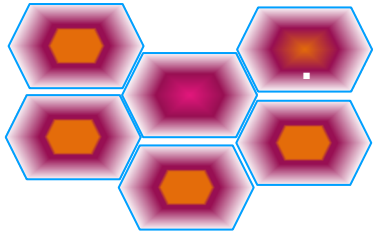
GIMEMA AML1310 trial of risk-adapted, MRD-directed therapy for young adults with newly diagnosed acute myeloid leukemia

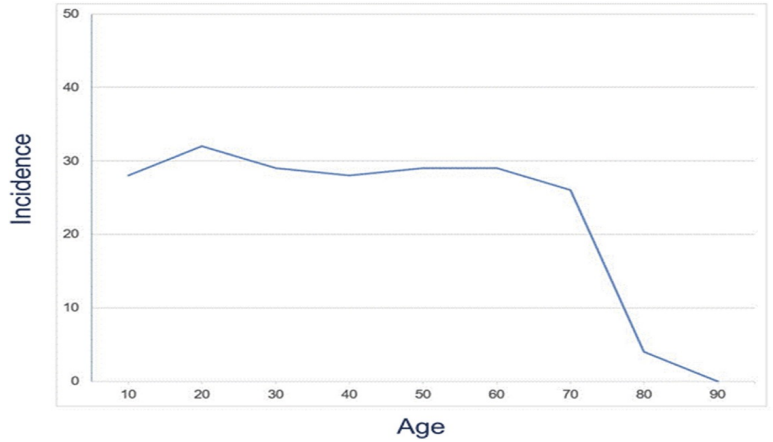
Adriano Venditti,[1,2] Alfonso Piciocchi,[3] Anna Candoni,[4] Lorella Melillo,[5] Valeria Calafiore,[6] Roberto Cairoli,[7] Paolo de Fabritiis,[8] Gabriella Storti,[9] Prassede Salutari,[10] Francesco Lanza,[11] Giovanni Martinelli,[12,13] Mario Luppi,[14] Patrizio Mazza,[15] Maria Paola Martelli,[16] Antonio Cuneo,[17] Francesco Albano,[18] Francesco Fabbiano,[19] Agostino Tafuri,[20] Anna Chierichini,[21] Alessia Tieghi,[22] Nicola Stefano Fracchiolla,[23] Debora Capelli,[24] Robin Foà,[25] Caterina Alati,[26] Edoardo La Sala,[3] Paola Fazi,[3] Marco Vignetti,[3] Luca Maurillo,[2] Francesco Buccisano,[1,2] Maria Ilaria Del Principe,[1,2] Maria Irno-Consalvo,[1] Tiziana Ottone,[1] Serena Lavorgna,[1] Maria Teresa Voso,[1,2] Francesco Lo-Coco,[1,2] William Arcese,[1,2] and Sergio Amadori[3]

		N°TMO	%
N° Pz. Trial	500	130	26
N° Pz. in R.C.	361	130	36
N° Pz. candidati Allo	188	130	69

- 361 of 500 patients (72%) achieved a complete remission,
- 342/361 completed the consolidation phase and were treatment allocated: **165 (48%) to AlloSCT** (122 PR, 43 IR MRD-positive) **plus 23 rescued** after salvage therapy, for a total of **188 candidates;** 150 (44%) to AuSCT (115 FR, 35 IR MRD-negative) plus 27 IR patients (8%) with no leukemia-associated phenotype, for a total of 177 candidates.
- Overall, 110/177 (62%) and **130/188 (71%)** AuSCT or **AlloSCT** candidates received it, respectively.

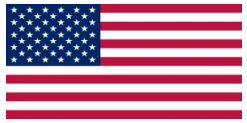
GREY ZONES





HLA ID = 29%
Other rel = 15%
URD = 47%
CB = 8%
Auto = 1%

REAL LIFE



21380 NEW AML CASES IN USA IN 2017
MEDIAN AGE 68

Appelbaum BBMT 2017

LIKELIHOOD TO BE ALLO TRANSPLANTED LESS THAN 30%

1031 PTS WITH INT/HIGH RISK ACHIEVED CR1
ONLY 19% ACTUALLY TRANSPLANTED

Østgård BBMT 2018

RELAXING ELIGIBILITY CRITERIA

For many are called, but few are chosen

Mattew 22:14

Estey & Gale Leukemia 2017

Nuove diagnosi di AML vs Numero di Trapianti allogenici

- Nuovi casi attesi in Italia /anno/ 100.000 abitanti : 3500 (AIRTUM 2015 malattie rare ematologiche), età mediana 68 anni, % low risk 32% (ELN 2017)
- Numero di trapianti allogenici 800 procedure/anno – Survey GITMO 2020 (procedure > 65 anni 25%)
- **Età < 68 anni** : N°nuove dx/y 1750 meno LR = **1190** casi

  N°TMO eseguiti **600** (75% di 800), pari al **50%** delle indicazioni
- **Età > 68 anni** : N°nuove dx/y 1750 meno LR = 1190 - Pz > 75 a (circa 50%)= **600** casi

  N°TMO eseguiti **200** (25% di 800), pari al **30%** delle indicazioni
- **Transplant rate inferiore all'atteso** per numerose variabili correlate non solo al paziente…
- **Le percentuali del TMO allogenico nei trails non rispecchiano la real life**
- **Ulteriore e forte indicazione ad inserire i Pz. in studi clinici**

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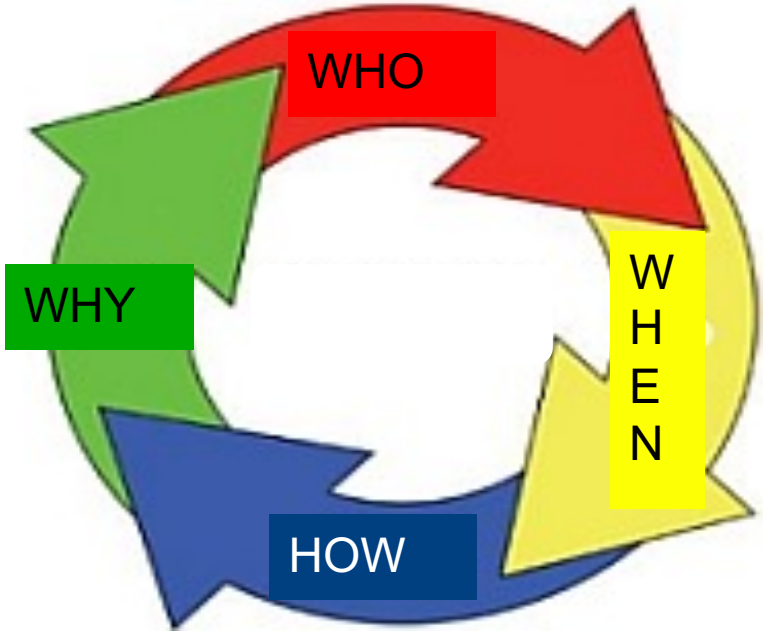
Indications



Allotransplant is the most effective therapy able to reduce the relapse risk but its overall benefit is limited by the NRM and QoL

Reduction of relapse is independent of the genetic risk

A seminal metanalysis demonstrated that the overall benefit from allo regards adverse and intermediate genetic risk pts

°Yanada Cancer 2005

*Cornelissen Blood 2007

Koreth JAMA 2009

WHO (in CR1- fit to chemo-)

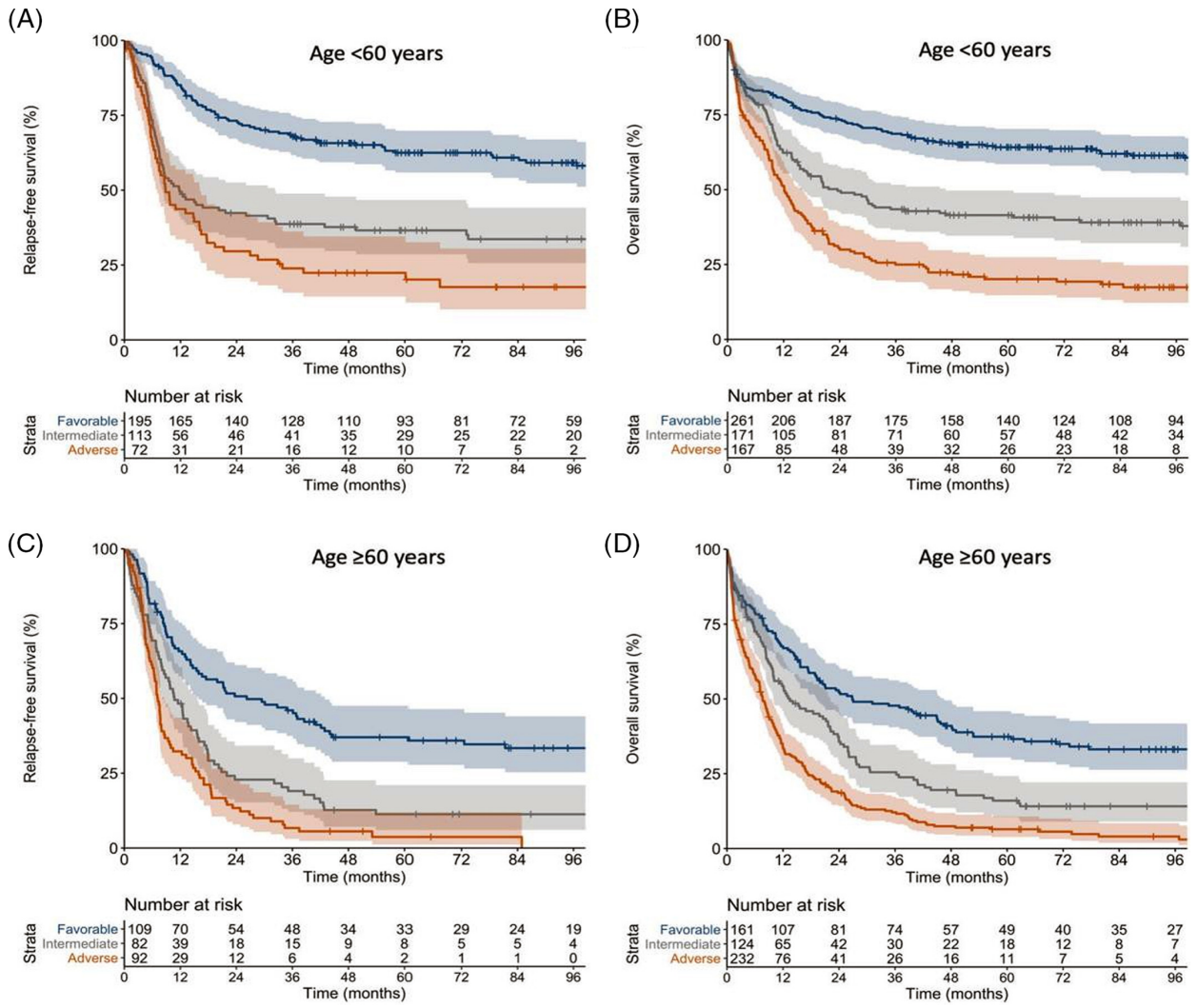
Consider **GENETIC RISK** + **MRD** + **TRANSPLANT FACTORS**

Table 5. 2017 ELN risk stratification by genetics

Risk category*	Genetic abnormality
Favorable	t(8;21)(q22;q22.1); *RUNX1-RUNX1T1*
	inv(16)(p13.1q22) or t(16;16)(p13.1;q22); *CBFB-MYH11*
	Mutated *NPM1* without *FLT3*-ITD or with *FLT3*-ITD^{low}†
	Biallelic mutated *CEBPA*
Intermediate	Mutated *NPM1* and *FLT3*-ITD^{high}†
	Wild-type *NPM1* without *FLT3*-ITD or with *FLT3*-ITD^{low}† (without adverse-risk genetic lesions)
	t(9;11)(p21.3;q23.3); *MLLT3-KMT2A*‡
	Cytogenetic abnormalities not classified as favorable or adverse
Adverse	t(6;9)(p23;q34.1); *DEK-NUP214*
	t(v;11q23.3); *KMT2A* rearranged
	t(9;22)(q34.1;q11.2); *BCR-ABL1*
	inv(3)(q21.3q26.2) or t(3;3)(q21.3;q26.2); *GATA2,MECOM(EVI1)*
	−5 or del(5q); −7; −17/abn(17p)
	Complex karyotype,§ monosomal karyotype‖
	Wild-type *NPM1* and *FLT3*-ITD^{high}†
	Mutated *RUNX1*¶
	Mutated *ASXL1*¶
	Mutated *TP53*#

Dohner Blood 2017

Acute myeloid leukemia: 2021 update on risk-stratification and management



	5 yrs OS –ELN 2017 risk group	
	Age < 60	Age ≥ 60
LOW Risk	64%	37%
INT Risk	42%	16%
HIGH Risk	20%	6%

American Journal of Hematology, Volume: 95, Issue: 11, Pages: 1368-1398, First published: 24 August 2020, DOI: (10.1002/ajh.25975)

bjh review

The role of allogeneic stem cell transplantation in the management of acute myeloid leukaemia: a triumph of hope and experience

Justin Loke,[1,2] Ram Malladi,[1,2] Paul Moss[1,2] and Charles Craddock[1,2]

[1]Centre for Clinical Haematology, Queen Elizabeth Hospital and [2]University of Birmingham, Birmingham, UK

British Journal of Haematology, 2020

2017 ELN Risk stratifications by genetics	MRD after cycle 2 chemotherapy	Estimated risk of relapse, based on consolidation with:		Maximal tolerated NRM prognostic scores for allo-SCT to be beneficial	
		Chemotherapy alone (%)	Allo-SCT (%)	HCT-CI score	NRM risk (%)
Favourable	Negative	25–35	15–20	N/A (<1)	5
	Positive	70–80	30–40	≤3–4	<30
Intermediate	Negative	50–60	25–30	≤2	<20
	Positive	70–80	30–40	≤3–4	<30
Adverse	N/A	>90	45–55	<5	<35

Selection of patients with acute myeloid leukaemia in first complete remission for allogeneic stem cell transplantation (allo-SCT), based on relapse risk (Döhner et al., 2017; Schuurhuis et al., 2018) and estimate of non-relapse mortality (NRM) (Sorror et al., 2014), adapted from Cornelissen and Blaise (2016).

WHEN	WHO
CR1	HIGH RISK pts INTERMEDIATE RISK (MRD_{POS}) pts
CR2	ALL RISKs
Active disease	REFRACTORY/rel DISEASES

Intermediate MRD neg risk pts in CR1?

Favourable risk pts in CR2 ?

Koreth JAMA 2009; Dohner Blood 2017

Ten-year outcome of patients with acute myeloid leukemia not treated with allogeneic transplantation in first complete remission. Vaso S. et al. Blood Advances, 2018

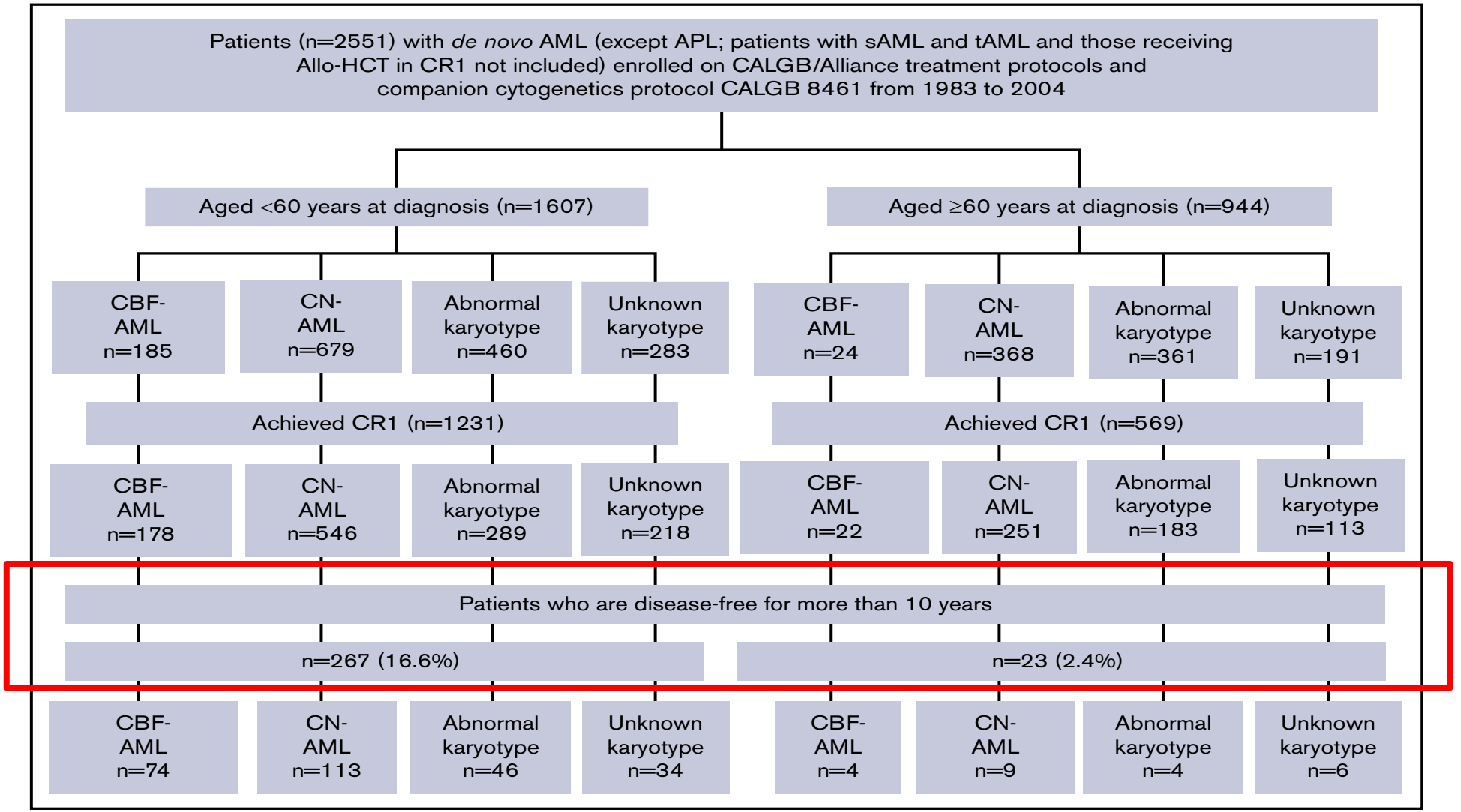


Figure 1. Overview of AML patients enrolled on the CALGB 8461 cytogenetic study and receiving chemotherapy-based treatment on successive CALGB trials. Abnormal karyotype indicates other abnormal karyotypes (excluding CBF-AML); unknown karyotype (due to inadequate mitoses). APL, acute promyelocytic leukemia; CALGB, Cancer and Leukemia Group B; CBF, core-binding factor; CN, cytogenetically normal; sAML, secondary AML; tAML, therapy-related AML.

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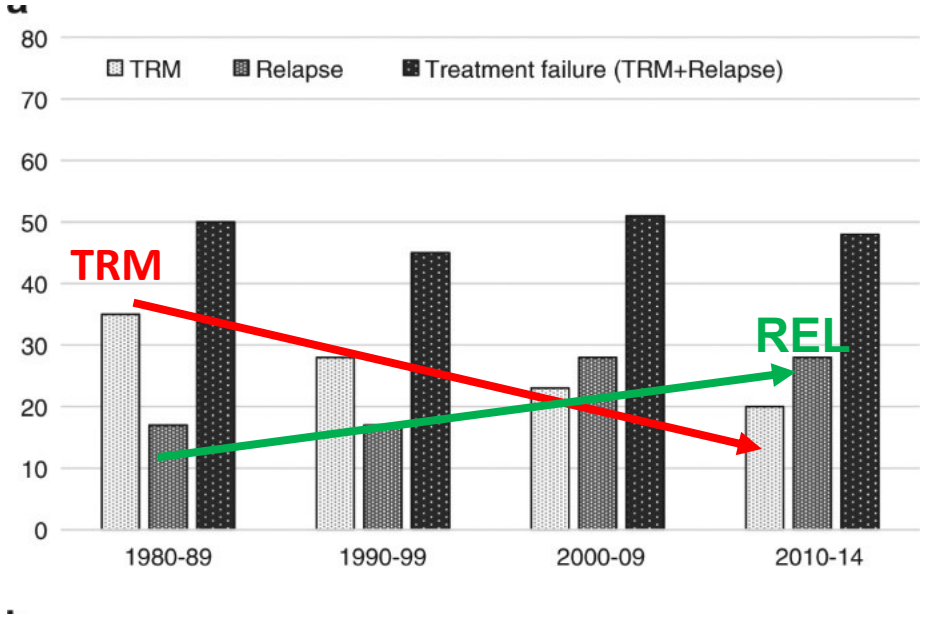
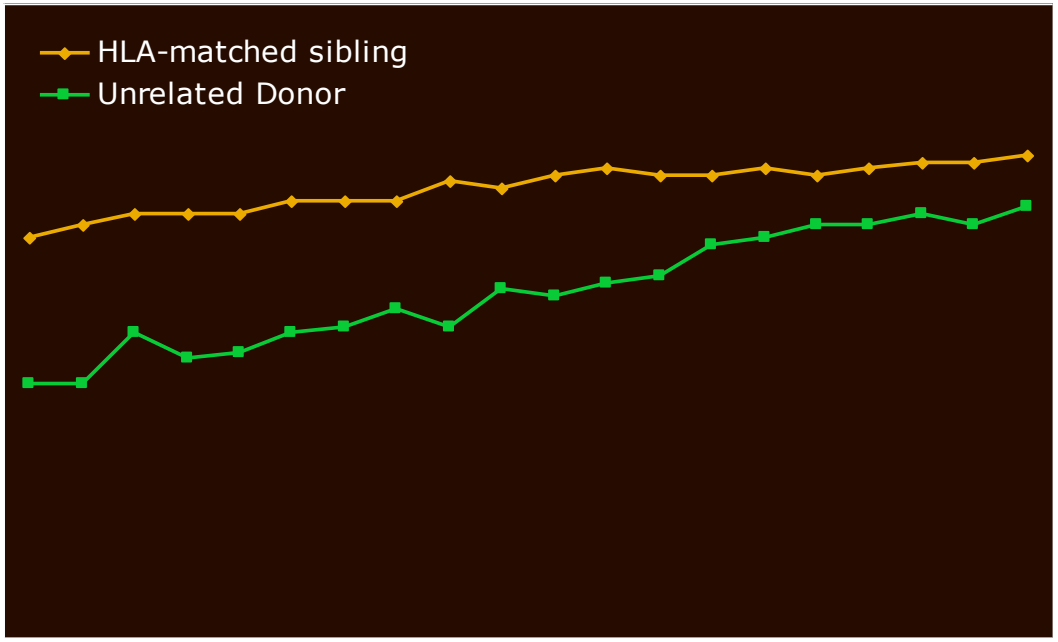
TRENDS IN ALLOGENEIC TRANSPLANT

ACUTE MYELOID LEUKEMIA – 1CR – MAC TRANSPLANT



One-year OS after MAC conditioning for AML any phase



2000 → **2020**

COME MIGLIORARE L'EFFICACIA E RIDURRE LA TOSSICITÀ DEL TRAPIANTO ALLOGENICO

- TRM/NRM (HCT-CI, mEBMT SCORE, ADT...)
- SELEZIONE DEL DONOR *
- REGIMI DI CONDIZIONAMENTO
- MRD*
- PROFILASSI DELLA GVHD
- FOLLOW UP POST ALLO

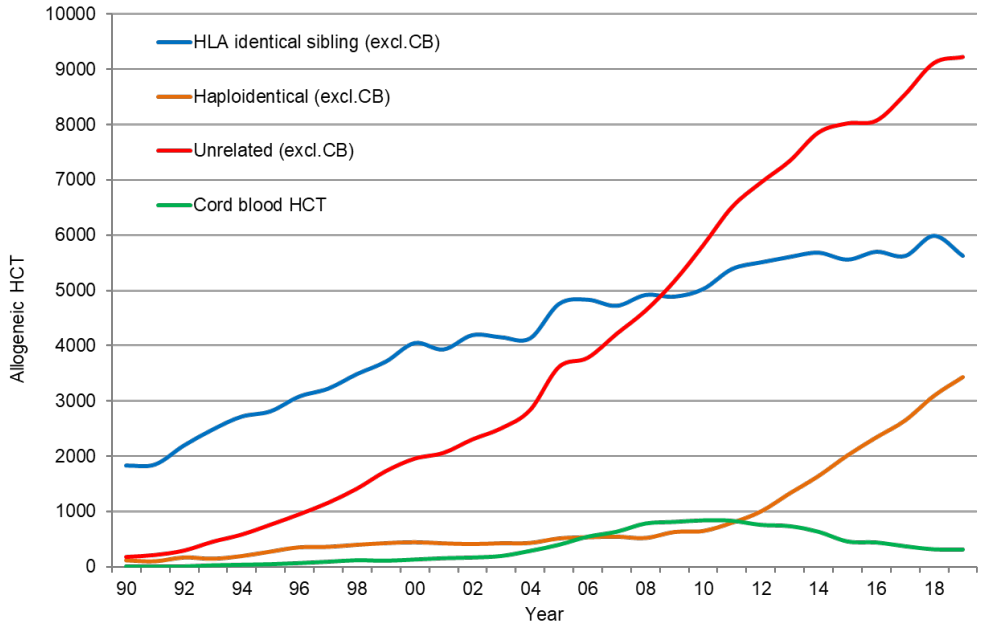
DONOR TYPE

CONVENTIONAL EBMT ALGORITHM FOR DONOR SELECTION ON THE BASIS OF HLA IN ADULT PATIENTS WITH HEMATOLOGICAL MALINGNANCY

1. HLA IDENTICAL SIBLING 0-30%
2. UNRELATED DONOR (MATCHED OR MISMATCHED) 40-60%
3. ALTERNATIVE DONOR (CORD BLOOD OR HAPLOIDENTICAL) 10-30%

Allogeneic Transplant by donor type

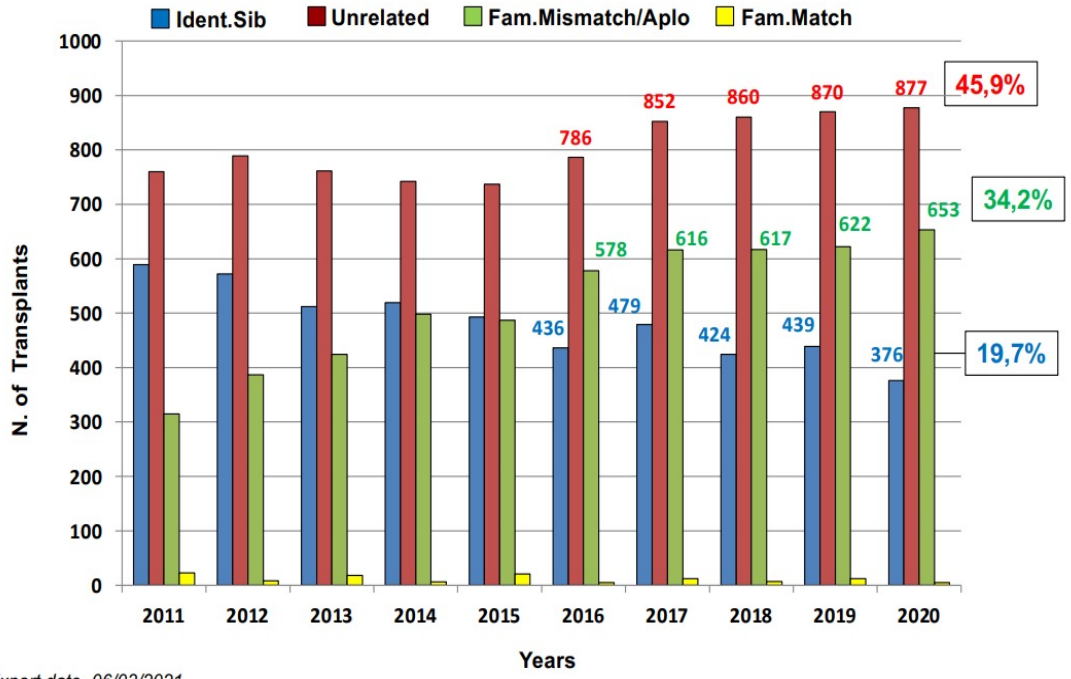
HCT activity in Europe 1990-2019: donor origin: 1st HCT



Passweg et al. Bone Marrow Transplant. 2021 Jul;56(7):1651-1664

URD	53.3%
HLA id	32.0%
Haplos	15.0%

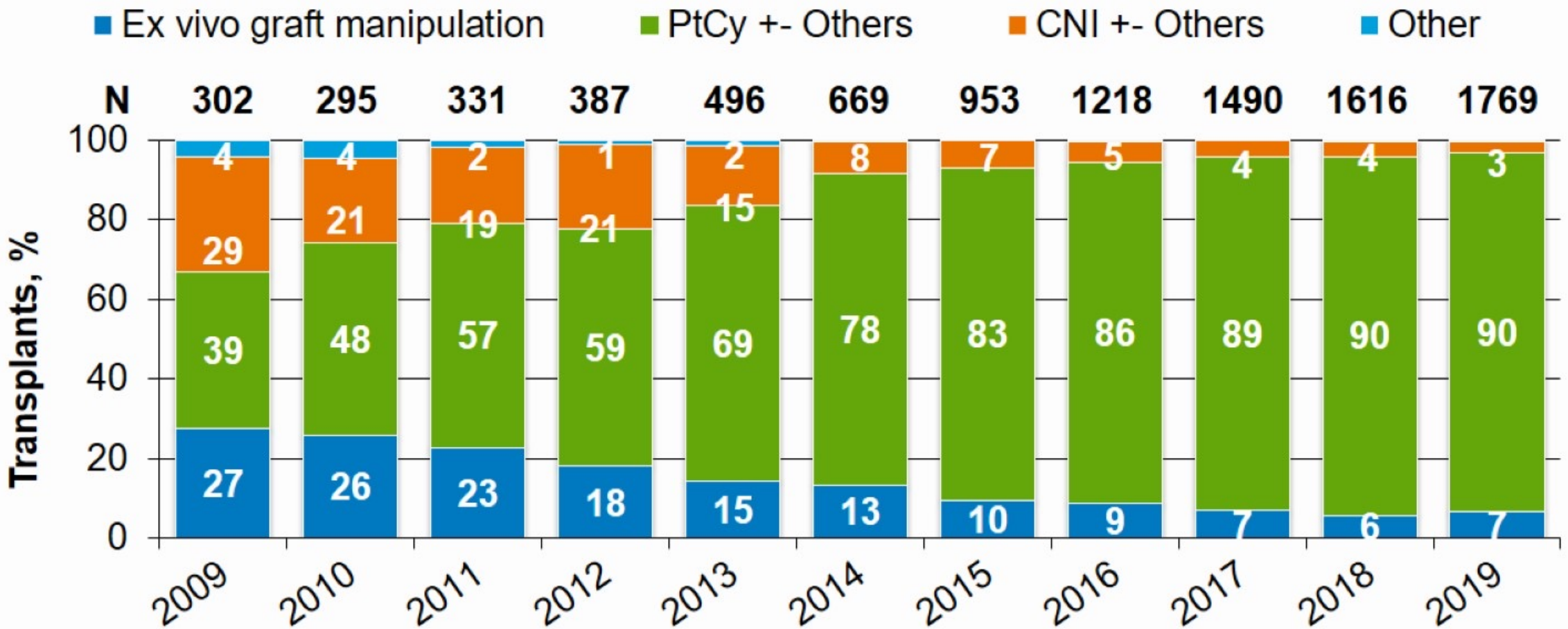
Allogeneic Transplants – Donor type



Export date 06/03/2021

DA VITA NASCE VITA: PROMUOVERE LA DONAZIONE DI CELLULE STAMINALI EMOPOIETICHE IN ITALIA

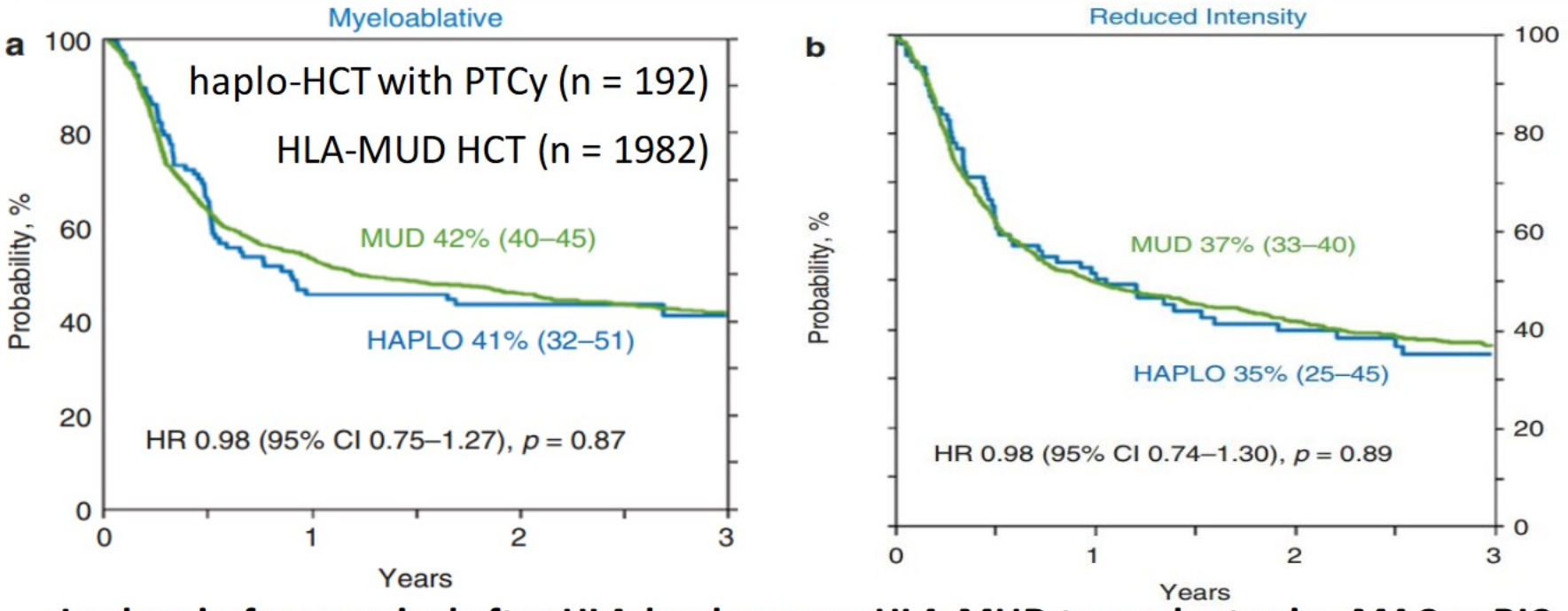
Haploidentical HCT in the US by GVHD Prophylaxis



CIBMTR
CENTER FOR INTERNATIONAL BLOOD & MARROW TRANSPLANT RESEARCH

Abbreviations - PtCy: Post-transplant cyclophosphamide; CNI: calcineurin inhibitor

Adult AML-Haplo Allo SCT



Leukemia-free survival after HLA-haplo versus HLA-MUD transplant using MAC or RIC

Protocol: Bu/Cy (MAC) + Unmanipulated BM + PTCy + CSA + MMF

CIBMTR Retrospective analysis

Ciurea SO, Zhang MJ, Bacigalupo AA, Bashey A, Appelbaum FR, Aljitawi OS, et al.
Haploidentical transplant with posttransplant cyclophosphamide vs matched unrelated donor transplant for acute myeloid leukemia. Blood. 2015;126(8):1033–40.

Clinical results: T-repleted Haplo vs MUD

1. Hematological recovery slower in haplo than MUD, even if PBSC are used.

1. Higher graft rejection rate in haplo than in matched MUD, related to anti DSA Ab.

2. Similar rate of acute GvHD , lower rate of chronic GVHD in haplo vs MUD, expecially if only patients receiving PBSC were considered

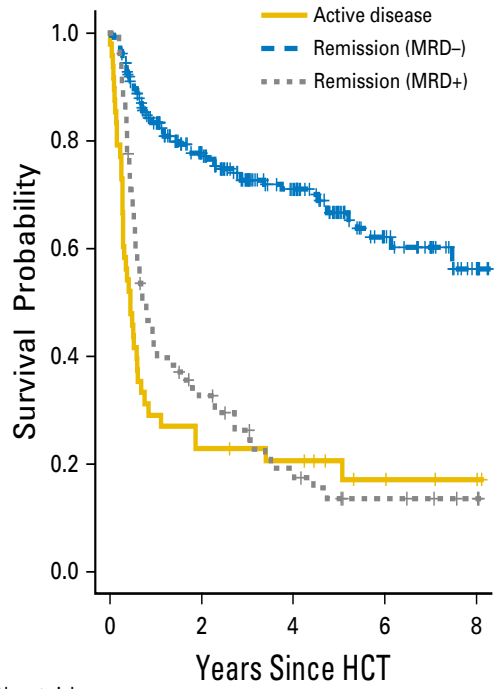
4. Although results of randomized trials are not available (ongoing phase 3 NCT02623309 in pts aged 55-70 years without HLA identical sibling), outcome Haplo is not inferior to mismatched MUD and similar to matched MUD in most studies.

5. Choice of donor should be also based on urgency of transplant, experience of the center and non HLA donor factors.

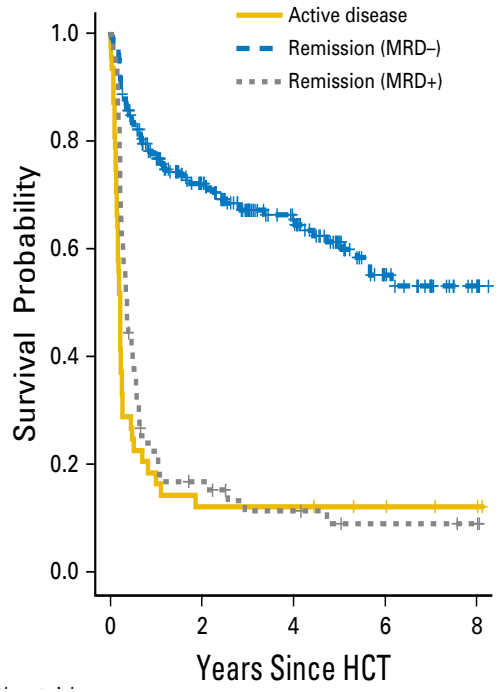
MEASURABLE RESIDUAL DISEASE

IMPACT OF PRETANSPLANT MDR+ FLOW TEST ON TRASPLANT OUTCOME

A

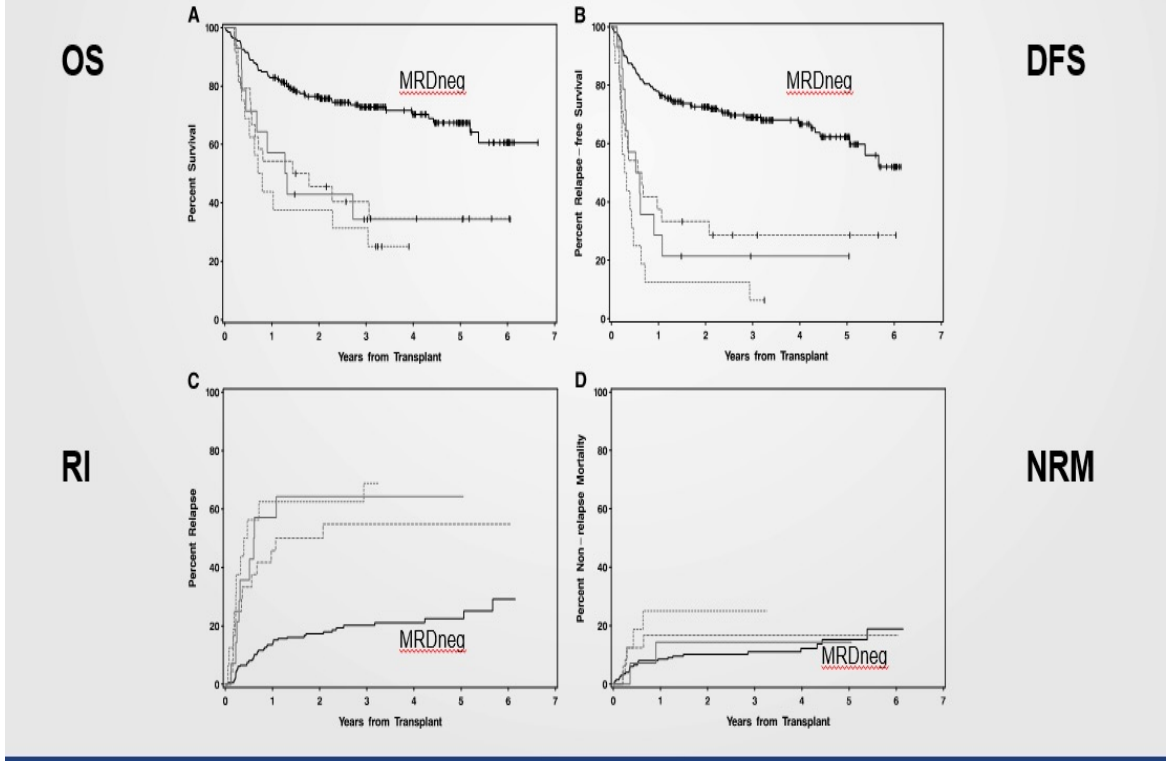


B



ARAKJ D. ET AL. JCO 2016,329

Relationship between pre-HCT MRD levels, as determined by multiparameter flow cytometry, and post-HCT outcome for AML patients in cCR



Walter, RB et al.: Blood. 2013;122(10):1813-1821

Clinical value of the measurable residual disease status within the ELN2017 risk groups in AML patients undergoing allogeneic stem cell transplantation

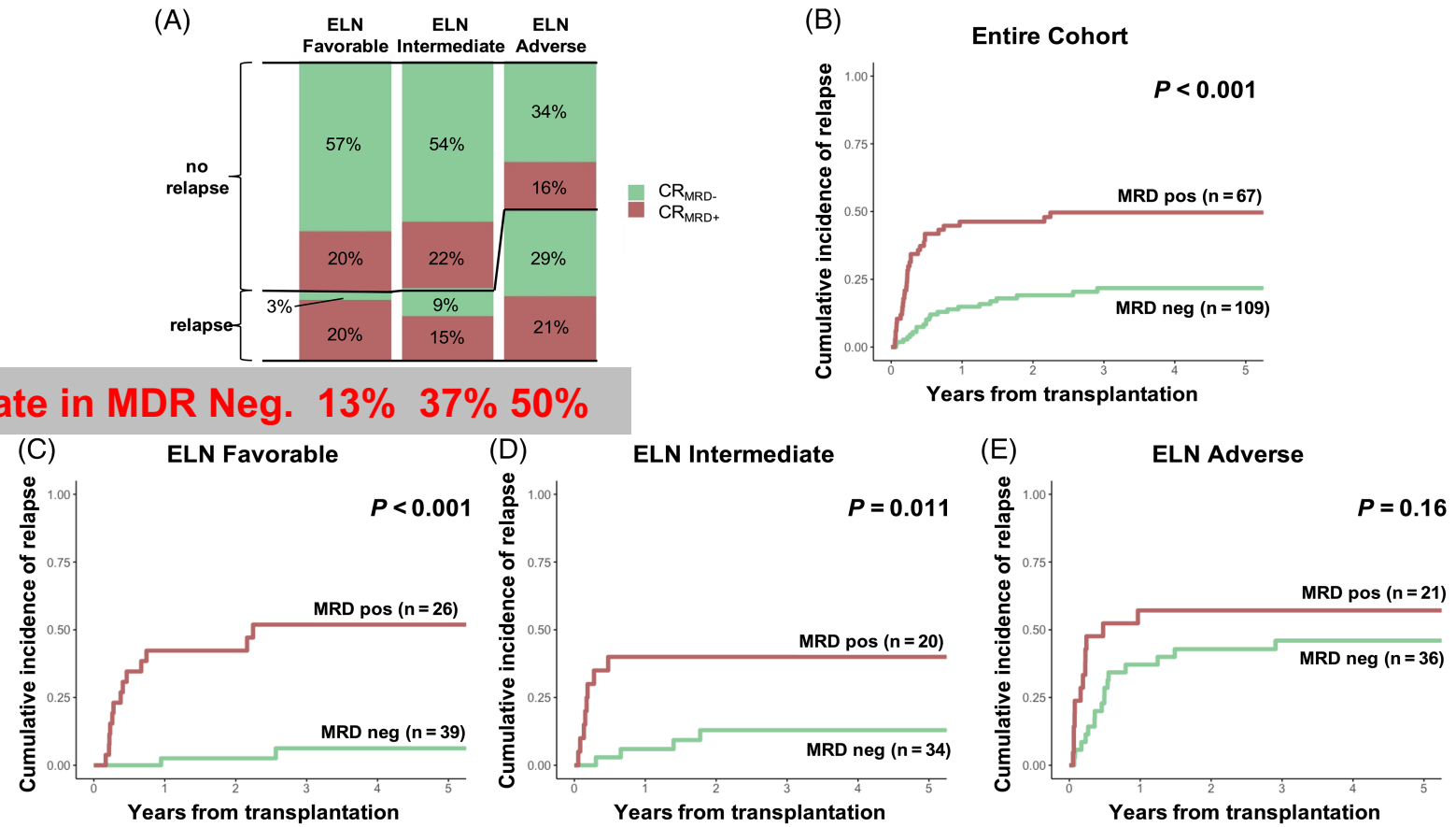


FIGURE 1 Patient outcome according to MRD status and ELN2017 risk. A Percentage of patients suffering relapse according to MRD status within the different ELN2017 risk groups. B Cumulative incidence of relapse for all patients according to MRD status at HSCT and C for the ELN2017 favorable group, D for the ELN2017 intermediate group and E for the ELN2017 adverse group

WT1 PRE ALLO-SCT

ELSEVIER

CrossMark

Experimental Hematology

Experimental Hematology 2017;49:25–33

Predictive value of pretransplantation molecular minimal residual disease assessment by WT1 gene expression in FLT3-positive acute myeloid leukemia

Anna Candoni, Federico De Marchi, Francesca Zanini, Maria Elena Zannier, Erica Simeone, Eleonora Toffoletti, Alexsia Chiarvesio, Michela Cerno, Carla Filì, Francesca Patriarca, and Renato Fanin

Division of Hematology and Stem Cell Transplantation, Azienda Sanitaria Universitaria Integrata di Udine, University of Udine, Udine UD, Italy

(Received 4 October 2016; revised 8 December 2016; accepted 22 January 2017)

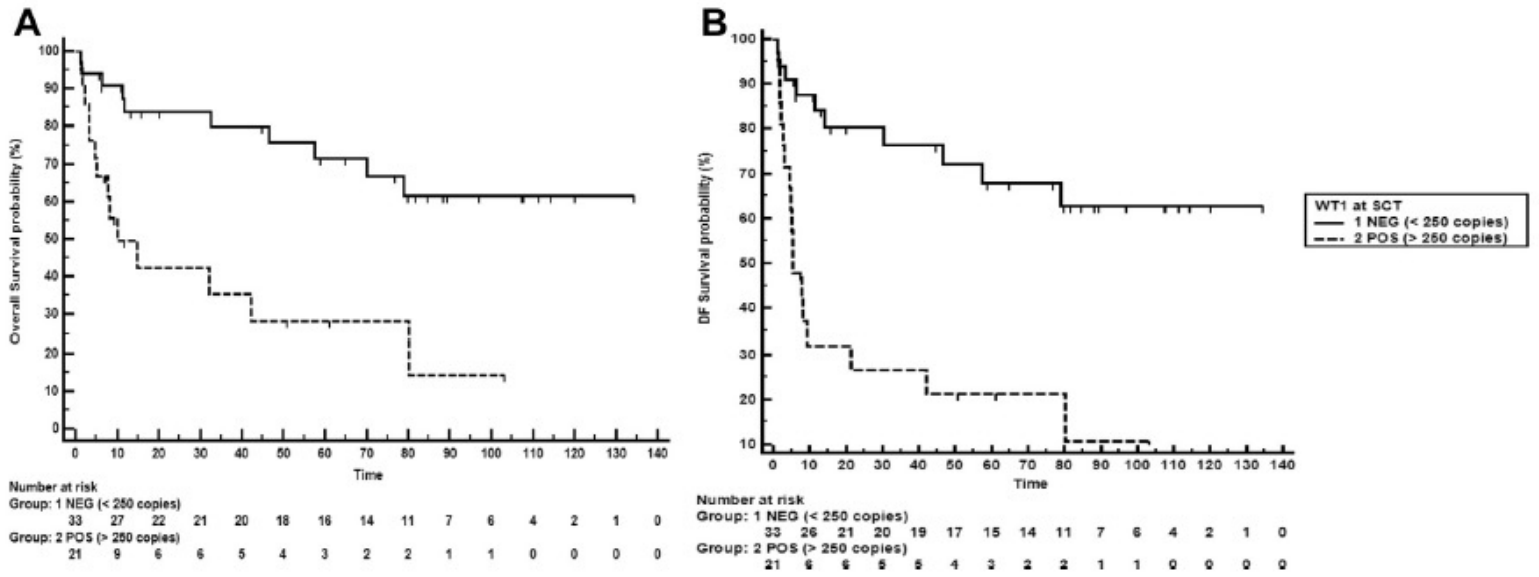


Figure 2. (**A**) OS and (**B**) DFS after allo-SCT according to WT1 levels before allo-SCT (WT1-negative vs WT1-positive). For (**A**), WT1-negative patients, median OS was not reached; for WT1-positive patients, median OS = 10.2 months (log–rank p = 0.0005, HR = 3.7, 95% CI = 1.5–9). For (**B**), WT1-negative patients, median DFS was not reached; for WT1-positive patients, median DFS = 5.5 months (log–rank p = 0.0001, HR = 4.38, 95% CI = 1.9–10); for WT1-negative patients, 5-year probability of OS and DFS: 70% and 67%, respectively.

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LAM a RISCHIO FAVOREVOLE

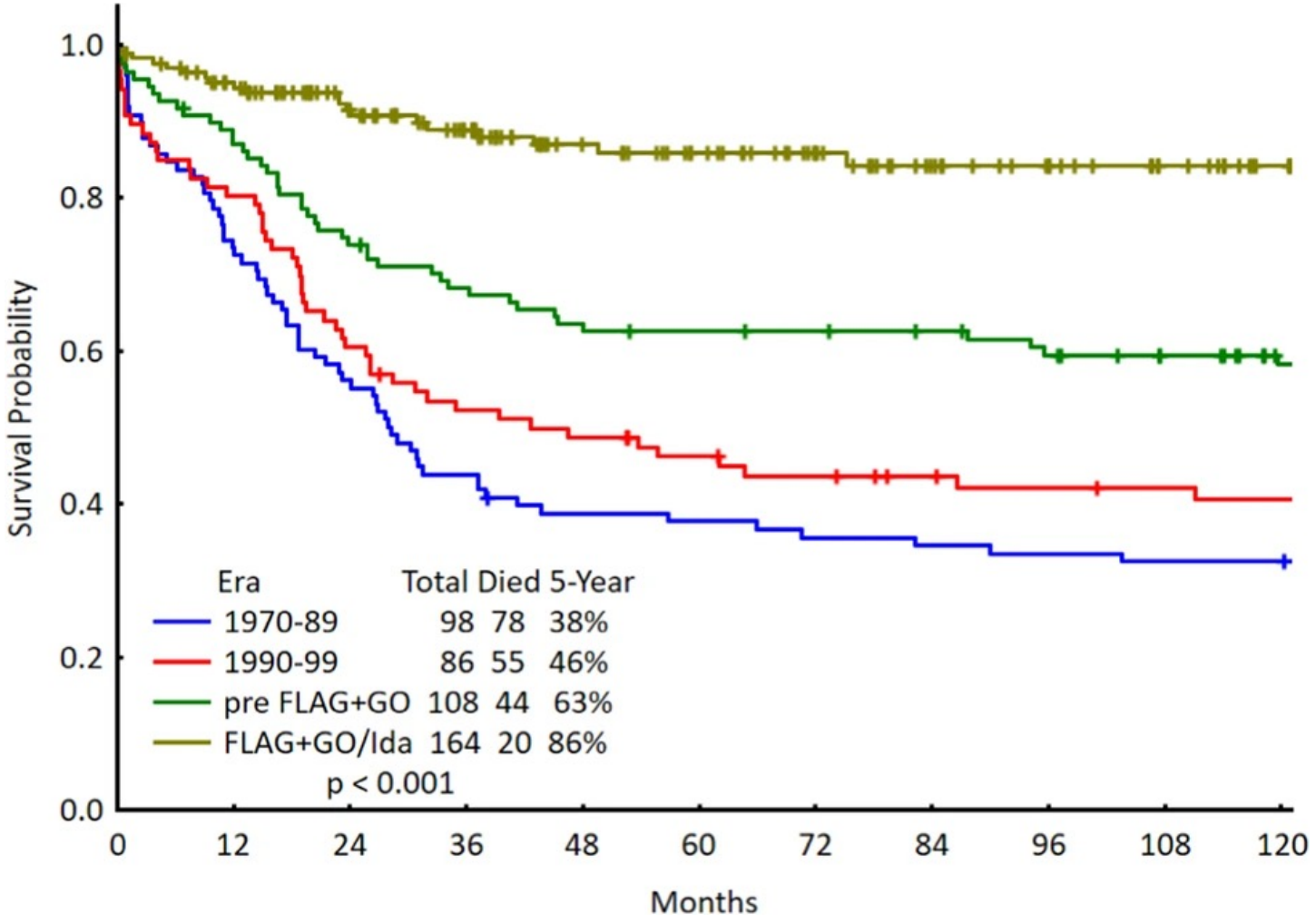
Survival of core-binding factor acute myeloid leukemia at MD Anderson (1970–2020)

Review Article | Open Access | Published: 22 February 2021

Acute myeloid leukemia: current progress and future directions

Hagop Kantarjian ✉, Tapan Kadia, Courtney DiNardo, Naval Daver, Gautam Borthakur, Elias Jabbour, Guillermo Garcia-Manero, Marina Konopleva & Farhad Ravandi

Blood Cancer Journal **11**, Article number: 41 (2021) | Cite this article



American Journal of Hematology AJH

192 patients (median age 44) treated with curative intent in 11 Italian hematology institutions from 1987 to 2012

Research Article | Free Access

Complex karyotype, older age, and reduced first-line dose intensity determine poor survival in core binding factor acute myeloid leukemia patients with long-term follow-up

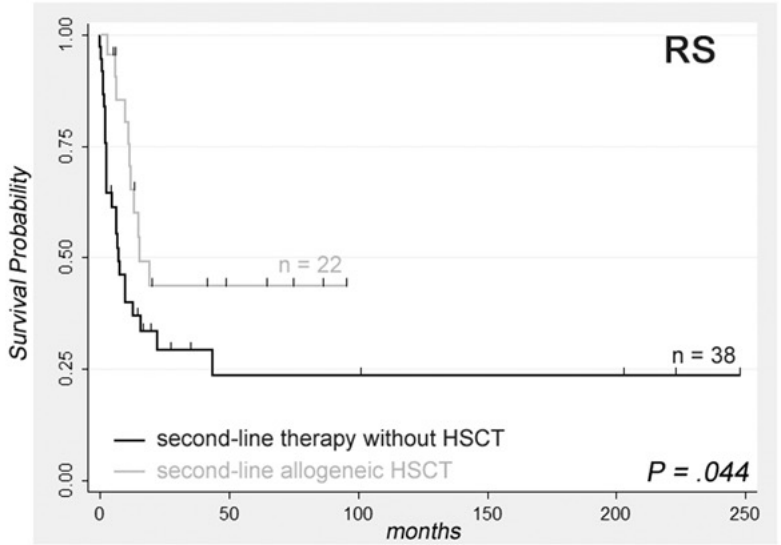
Federico Mosna, Cristina Papayannidis, Giovanni Martinelli, Eros Di Bona, Angela Bonalumi, Cristina Tecchio, Anna Candoni, Debora Capelli, Andrea Piccin, Fabio Forghieri, Catia Bigazzi, Giuseppe Visani, Renato Zambello, Lucia Zanatta, Francesca Volpato, Stefania Paolini, Nicoletta Testoni, Filippo Gherlinzoni, Michele Gottardi, ... See fewer authors

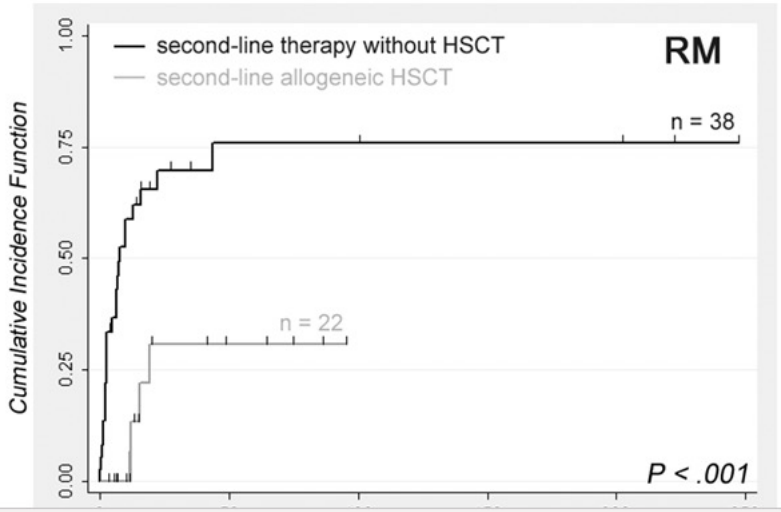
First published: 06 March 2015 | https://doi.org/10.1002/ajh.24000 | Citations: 43

AML t(8;21) (*n* = 80)	AML inv(16) (*n* = 112)	10-year OS 63.9%

TABLE III. Univariate and Multivariate Proportional Hazard Modeling for Potential Factors Impacting Overall Survival

	Univariate analysis		Multivariate analysis	
	RR (95% CI)	*P*	RR (95% CI)	*P*
Age >60 years	3.05 (1.69–5.51)	*<0.001*	4.52 (2.24–9.12)	*<0.001*
Secondary AML	2.30 (0.98–5.39)	0.056		
Male	0.98 (0.58–1.66)	0.95		
Splenomegaly	1.02 (0.50–2.08)	0.96		
Hepatomegaly	1.13 (0.62–2.07)	0.69		
≥2 lymph nodes	0.41 (0.15–1.13)	0.084		
Extramedullary disease	1.44 (0.68–3.04)	0.50		
Granulocytic sarcoma	1.50 (0.47–4.80)	0.50		
WBC ≥30 × 10^3/mm^3	1.07 (0.62–1.84)	0.81		
Platelets ≤20 × 10^3/mm^3	2.24 (1.29–3.91)	*0.004*	1.99 (1.08–3.66)	*0.027*
Elevated LDH	3.60 (1.12–11.57)	*0.032*	3.52 (1.07–11.60)	*0.038*
DIC	0.70 (0.33–1.48)	0.35		
inv(16) vs t(8;21)	0.75 (0.45–1.26)	0.28		
≥3 additional cytogenetic abnormalities	2.58 (1.02–6.49)	*0.044*	1.47 (0.48–4.48)	0.50
Presence of subclones	1.15 (0.66–1.98)	0.63		
Mutated *KIT*	2.33 (0.61–8.8)	0.21		
Mutated *FLT3*	0.95 (0.28–3.17)	0.93		
Packed marrow	1.37 (0.79–2.38)	0.26		
Failure to achieve CR1 after induction therapy	6.21 (2.92–13.22)	*<0.001*	5.43 (2.33–12.68)	*<0.001*





RUOLO ALLO-SCT in 2 RC/CBF

Stem Cell Transplantation

ARTICLE

Ferrata Storti Foundation

Allogeneic stem cell transplantation in second complete remission for core binding factor acute myeloid leukemia: a study from the Acute Leukemia Working Party of the European Society for Blood and Marrow Transplantation

Kazimierz Halaburda,[1*] Myriam Labopin,[2,3*] Audrey Mailhol,[2] Gerard Socié,[4] Charles Craddock,[5] Mahmoud Aljurf,[6] Dietrich Beelen,[7] Jan J. Cornelissen,[8] Jean-Henri Bourhis,[9] Hélène Labussière-Wallet,[10] Didier Blaise,[11] Tobias Gedde-Dahl,[12] Maria Gilleece,[13] Ibrahim Yakoub-Agha,[14] Ghulam Mufti,[15] Jordi Esteve,[16] Mohamad Mohty[2,3] and Arnon Nagler[2,17*]

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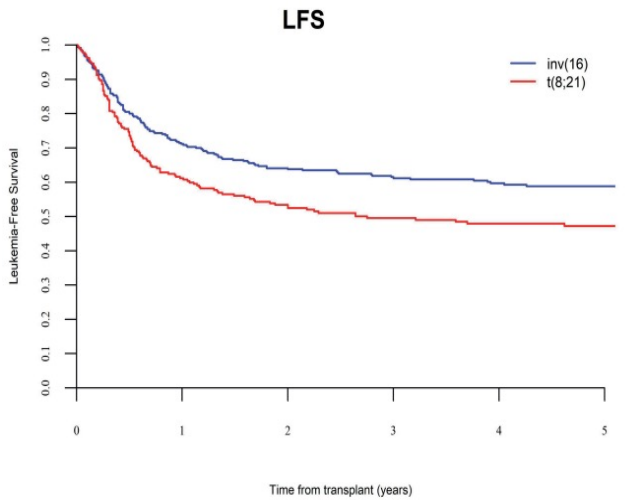
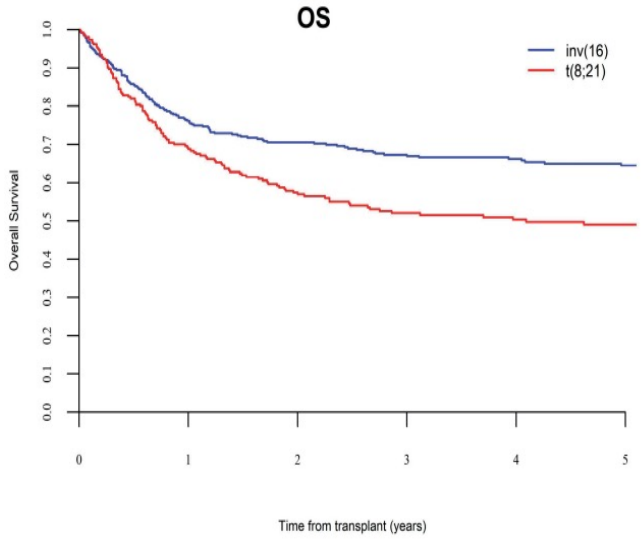
Volume 105(6):1723-1730

Number of patients	631
Median follow up, months (range)	59.6 (0.9 - 201)
Median year of transplantation (range)	2010 (2000-2014)
Type of AML	
inv(16)	366(58%)
t(8;21)	265(42%)
Median age at transplantation, years (range; IQR)	41.7 (18 -73; 31.3-51.2)
Median CR1 duration, days (range; IQR)	318 (6-2380; 246-474)
Median time from diagnosis to transplantation, months (range; IQR)	17 (3.5-222.9; 14-22.5)
Donors	
Matched siblings	264(42%)
Unrelated	367(58%)





Oncol Ther (2019) 7:33–65
https://doi.org/10.1007/s40487-018-0091-5

REVIEW

Acute Promyelocytic Leukemia: A History over 60 Years—From the Most Malignant to the most Curable Form of Acute Leukemia

Xavier Thomas

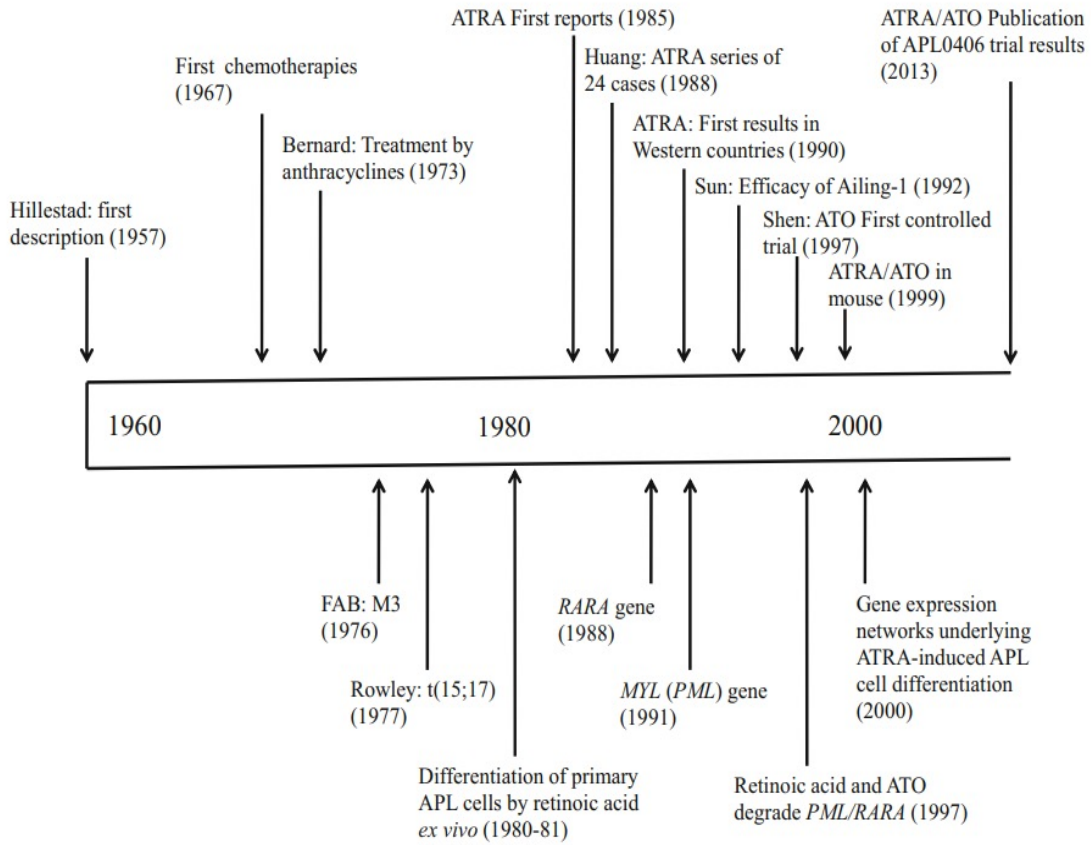


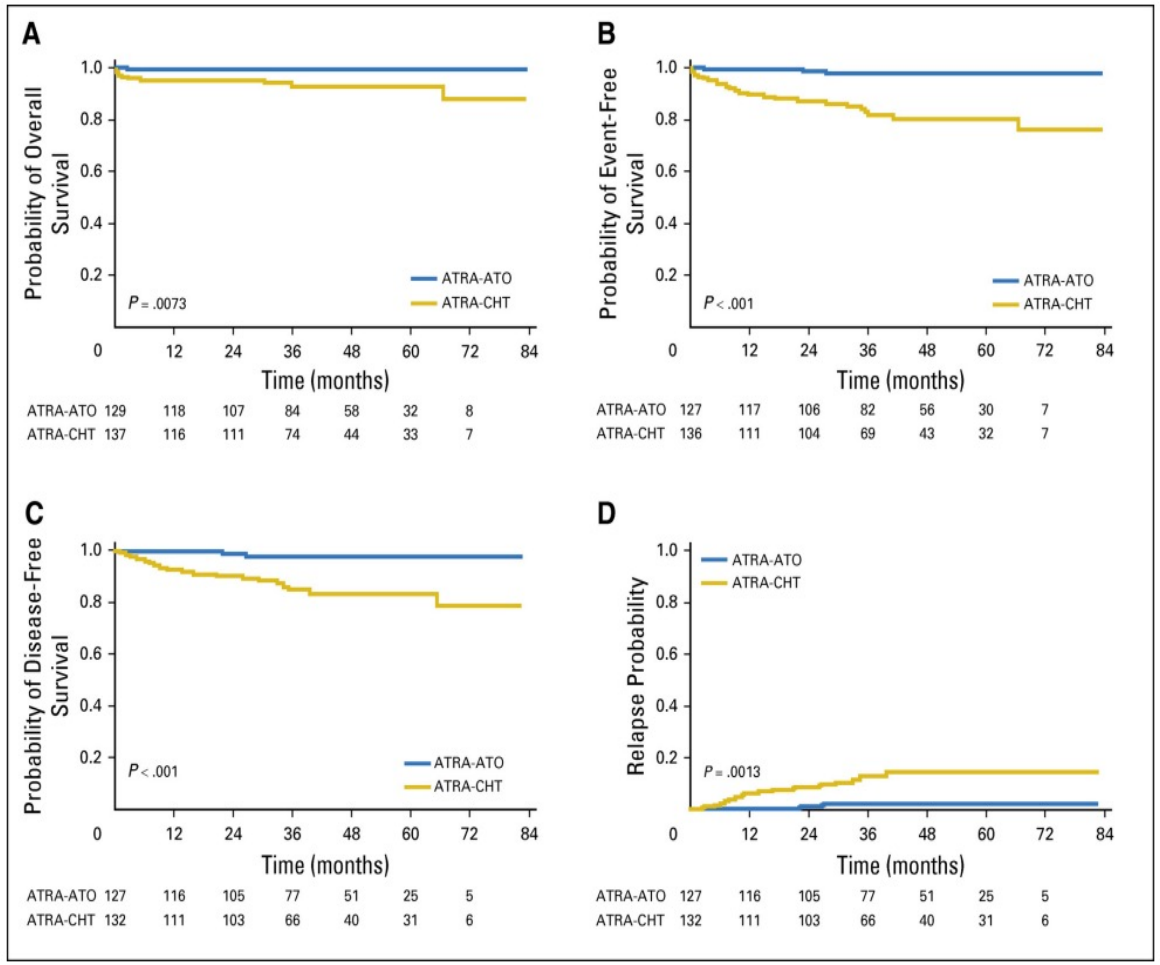
Fig. 1 Highlights in the history of APL treatment

VOLUME 35 · NUMBER 6 · FEBRUARY 20, 2017

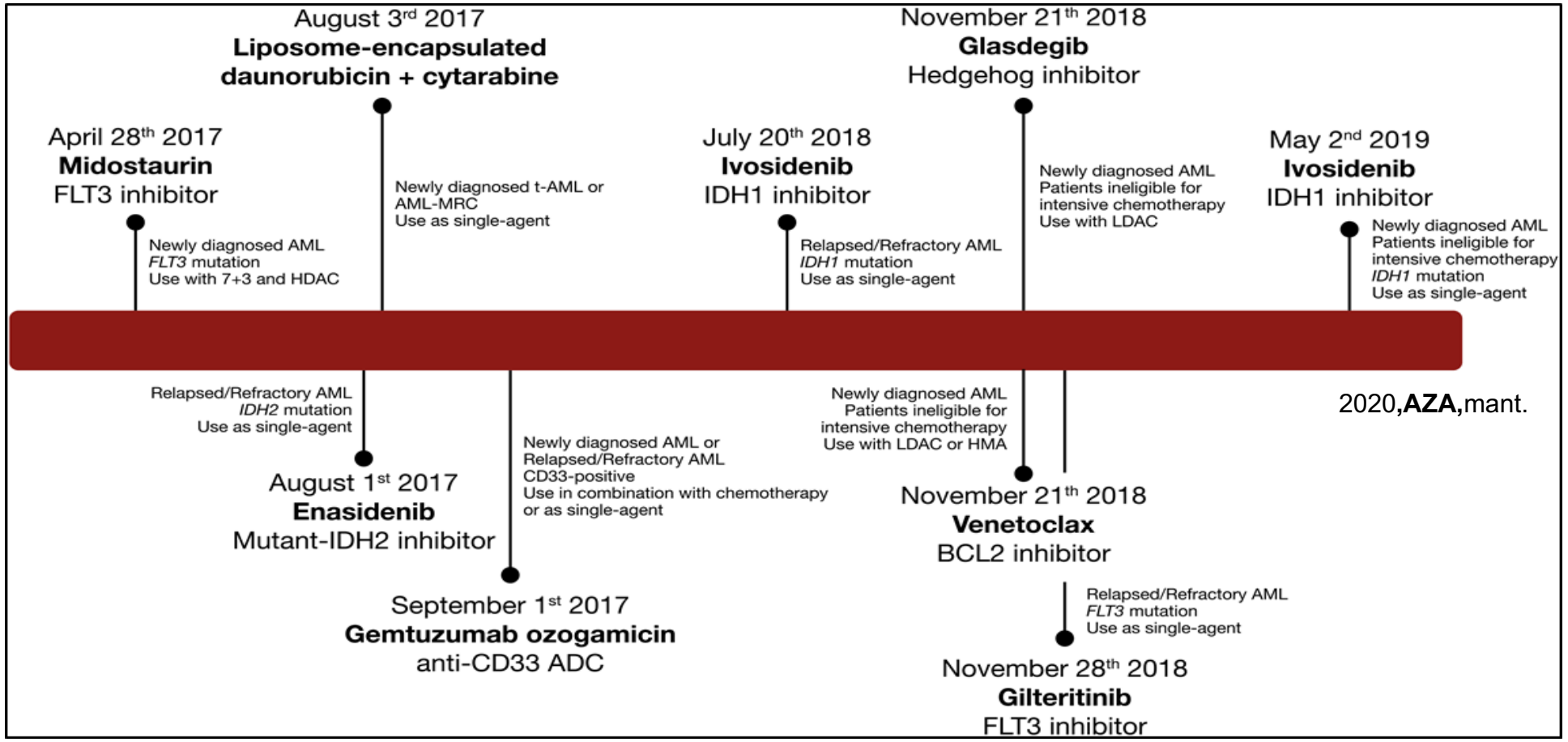
JOURNAL OF CLINICAL ONCOLOGY ORIGINAL REPORT

Improved Outcomes With Retinoic Acid and Arsenic Trioxide Compared With Retinoic Acid and Chemotherapy in Non–High-Risk Acute Promyelocytic Leukemia: Final Results of the Randomized Italian-German APL0406 Trial

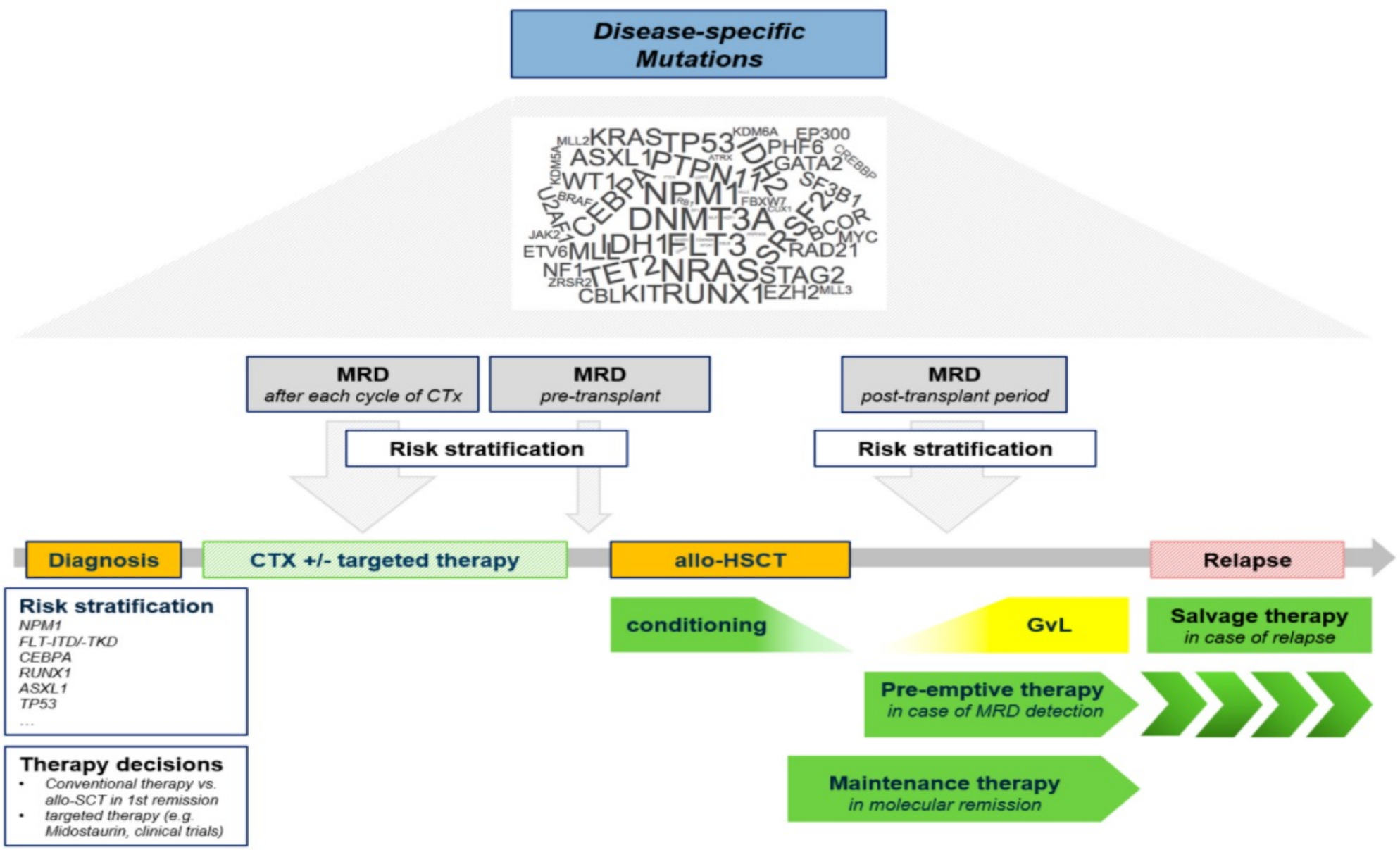
Uwe Platzbecker, Giuseppe Avvisati, Laura Cicconi, Christian Thiede, Francesca Paoloni, Marco Vignetti, Felicetto Ferrara, Mariadomenica Divona, Francesco Albano, Fabio Efficace, Paola Fazi, Marco Sborgia, Eros Di Bona, Massimo Breccia, Erika Borlenghi, Roberto Cairoli, Alessandro Rambaldi, Lorella Melillo, Giorgio La Nasa, Walter Fiedler, Peter Brossart, Bernd Hertenstein, Helmut R. Salih, Mohammed Wattad, Michael Lübbert, Christian H. Brandts, Mathias Hänel, Christoph Röllig, Norbert Schmitz, Hartmut Link, Chiara Frairia, Enrico Maria Pogliani,† Claudio Fozza, Alfonso Maria D'Arco, Nicola Di Renzo, Agostino Cortelezzi, Francesco Fabbiano, Konstanze Döhner, Arnold Ganser, Hartmut Döhner, Sergio Amadori, Franco Mandelli, Gerhard Ehninger, Richard F. Schlenk, and Francesco Lo-Coco



Did new drugs changed the way to transplant ???



POST-ALLO MAINTENANCE THERAPY



POST-ALLO FLT3 INIBITORI

TKI	FLT3 Targets	Maintenace post AlloHCT Studies Active or Completed	Reference for Results Available
Midostaurin	FLT3-ITD FLT3-TKD	NCT01883362 (RADIUS)	Thomas R, et al. *Blood.* 2018;132 (Suppl1): Abstr 662. http://www.bloodjournal.org/content/132/Suppl_1/662. Accessed Jan 25, 2019.
Sorafenib	FLT3-ITD	NCT01398501 (SORMAIN)	Burchet A, et al. *Blood.* 2018;132 (Suppl1): Abstr 661. http://www.bloodjournal.org/content/132/Suppl_1/563. Accessed Jan 25, 2019.
Gilteritinib	FLT3-ITD FLT3-TKD	NCT02997202	Recruiting; no results available
Quizartinib	FLT3-ITD	NCT02039726 (QUANTUM-R)	Cortes JE, et al. *Blood.* 2018;132 (Suppl1): Abstr 563. http://www.bloodjournal.org/content/132/Suppl_1/563. Accessed Jan 25, 2019.
Crenolanib	FLT3-ITD FLT3-TKD	NCT02400255*	Safety results: Oran B, et al. *Blood.* 2018;132 (Suppl1): Abstr 3426. http://www.bloodjournal.org/content/132/Suppl_1/3426. Accessed Jan 25, 2019.

POST-ALLO MAINTENANCE THERAPY

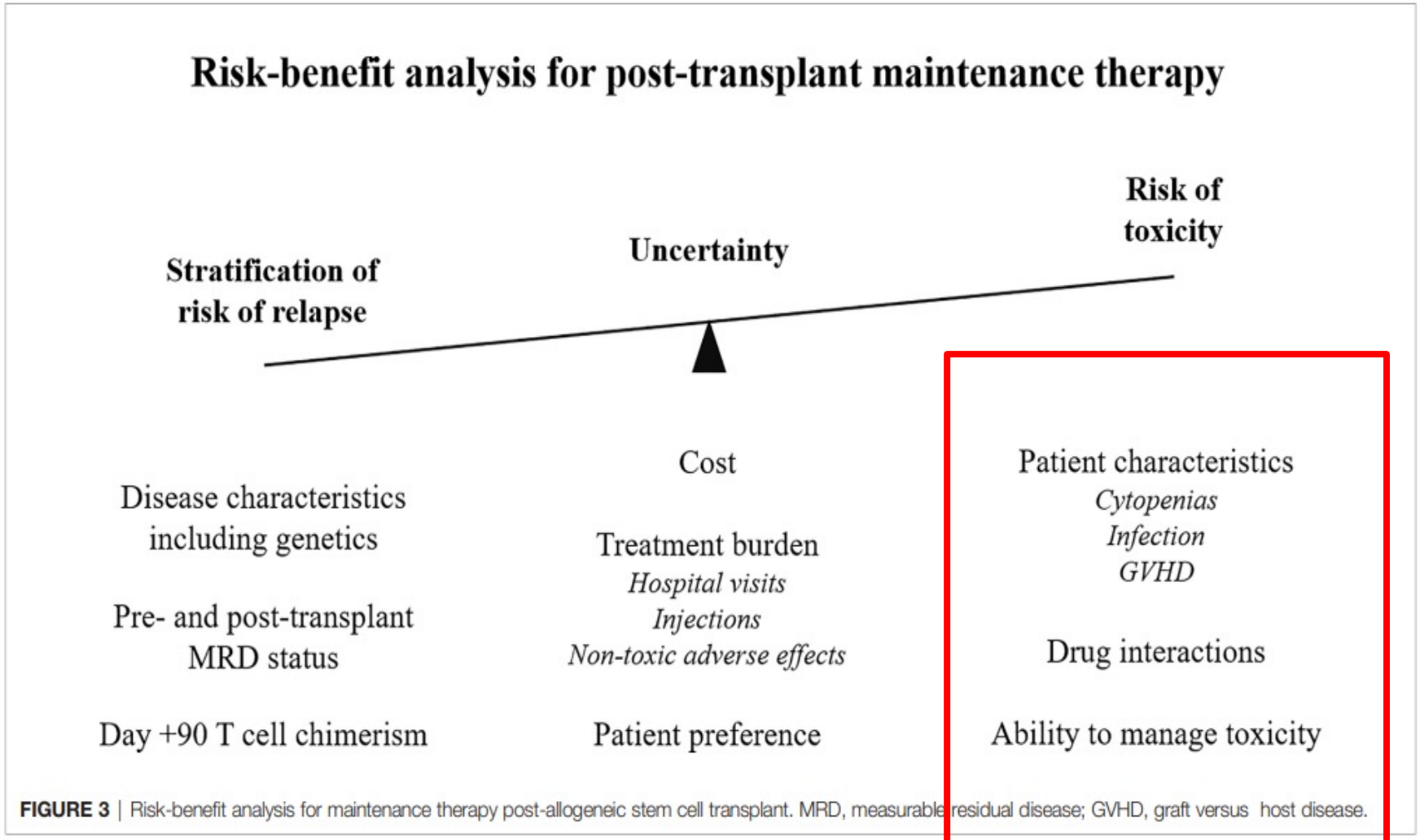


FIGURE 3 | Risk-benefit analysis for maintenance therapy post-allogeneic stem cell transplant. MRD, measurable residual disease; GVHD, graft versus host disease.

Frontiers in Immunology, 2021

POST-ALLO DEMETILANTI

ELSEVIER

Transplantation and Cellular Therapy

journal homepage: www.tctjournal.org

ASTCT
American Society for Transplantation and Cellular Therapy

Full Length Article
Cellular Therapy

Prophylactic or Preemptive Low-Dose Azacitidine and Donor Lymphocyte Infusion to Prevent Disease Relapse following Allogeneic Transplantation in Patients with High-Risk Acute Myelogenous Leukemia or Myelodysplastic Syndrome

Thierry Guillaume[1,2,*], Sylvain Thépot[2,3], Pierre Peterlin[1,2], Patrice Ceballos[4], Amandine Le Bourgeois[1,2], Alice Garnier[1,2], Corentin Orvain[2,3], Aurélien Giltat[2,3], Sylvie François[2,3], Yannick Le Bris[2,5], Clémentine Fronteau[6], Lucie Planche[7], Patrice Chevallier[1,2]

[1] *Department of Hematology, Nantes University Hospital, Hôtel-Dieu, Nantes, France*
[2] *Fédération Hospitalo-Universitaire Grand-Ouest Acute Leukemia, Nantes-Angers, France*
[3] *Department of Hematology, Angers University Hospital, Angers, France*
[4] *Department of Hematology, Montpellier University Hospital, Saint-Eloi Hospital, Montpellier, France*
[5] *Hematologic Biology Department, Nantes University Hospital, Hôtel-Dieu, Nantes, France*
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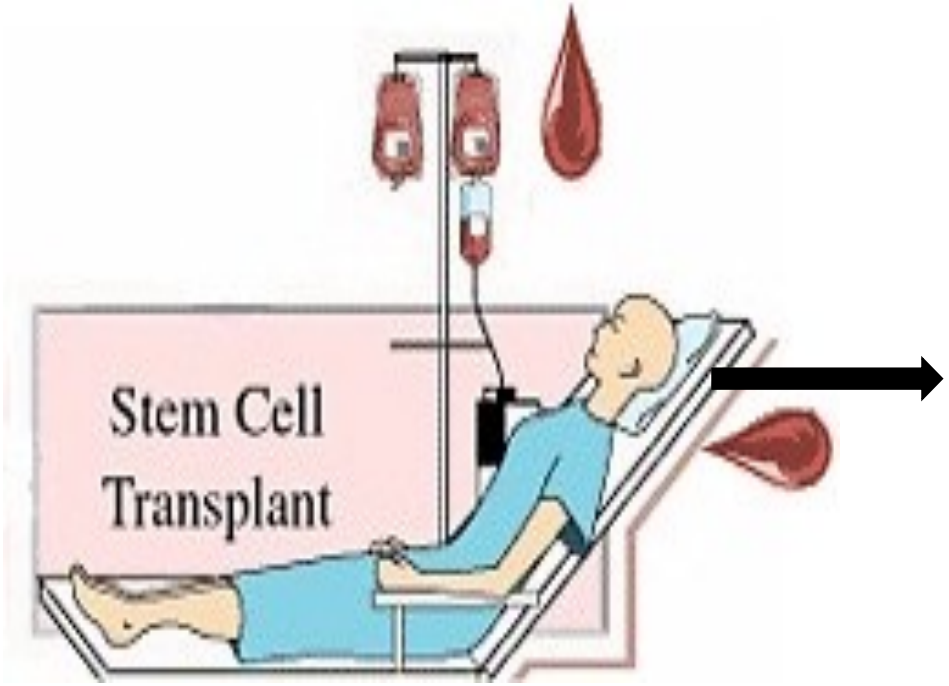
[7] *Clinical Research Unit, Regional Hospital of Vendée, Les Oudairies, La Roche-Sur-Yon, France*

Volume 27, Issue 10, October 2021

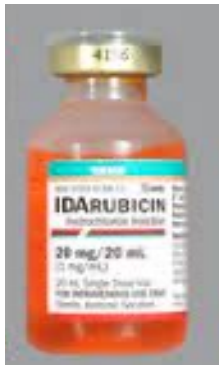
Highlights

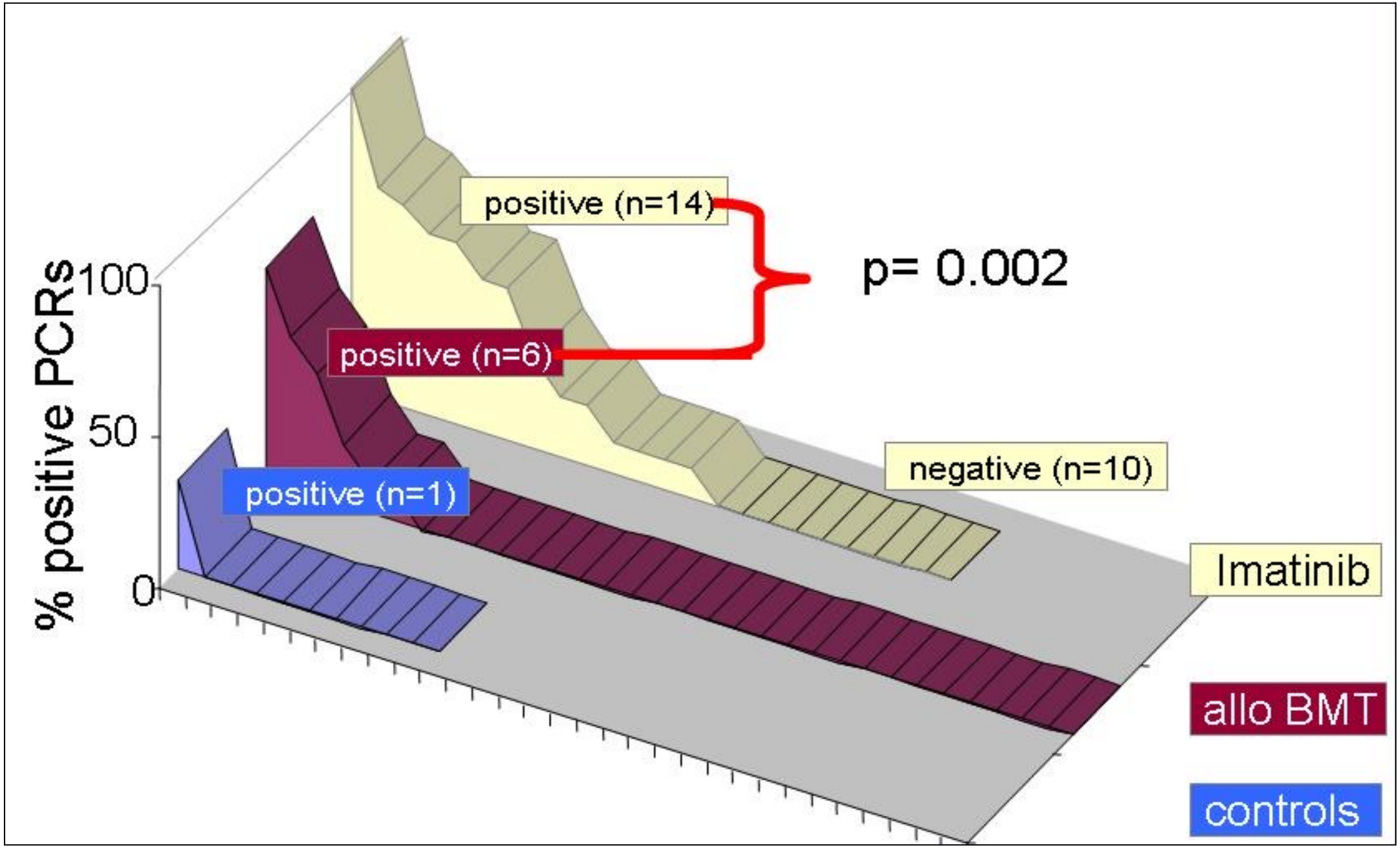
- Patients with high-risk acute myelogenous leukemia (AML) and myelodysplastic syndrome (MDS) may benefit from maintenance therapy after allogeneic hematopoietic stem cell transplantation.
- Prophylactic/preemptive low-dose azacitidine and donor lymphocyte infusion can be readily and safely administered with an acceptable incidence of subsequent graft-versus-host disease in patients with AML and MDS.
- The incidence of disease relapse was decreased in these patients, with increased overall survival compared with historical controls.

THE «DEPTH OF RESPONSE» ISSUE



«SAME» RESPONSE ?





Lange T. & Deininger M., NEJM 2003

TAKE HOME MESSAGGE

Numero dei trapianti eseguiti inferiore all'atteso, ma ruolo ALLO ancora irrinunciabile

Indicazione all'ALLO da ELN e MRD ma «grey zones»

Nuovi farmaci: impatto della diversificazione dell'induzione sulla percentuale e durata della risposta (3/7+GO , 3/7 + FLT3-I , CPX, Demet, Demet + Veneto)

L'applicazione del concetto della MRD nelle acute mieloidi è recente,
non siamo ancora in grado di dire quali pazienti MRD negativi non ricadranno (a parte APL)

Sustained MRD neg. post allo → guarigione Sustained MRD post target therapy ???

Il concetto della piattaforma allogenica

Il miglioramento della profilassi della GVHD e del Survival dovrebbero ridurre l' attrito verso l'allo:
LA RICADUTA POST TMO RIMANE TUTTORA LA PRINCIPALE CAUSA DI MORTE

ASU FC
Azienda sanitaria universitaria Friuli Centrale

REGIONE AUTONOMA FRIULI VENEZIA GIULIA

CLINICA EMATOLOGICA e CENTRO TRAPIANTI
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hic sunt futura

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Anna Candoni
Francesca Patriarca
Francesca Bonifazi
Alessandra Sperotto