

CIBMTR Analysis of HCT in Older Patients with AML or MDS

Presentation discussed in this issue:

McClune B et al. **Assessment of allogeneic HCT in older patients with AML and MDS: A CIBMTR analysis.** The Best of ASH Special and Plenary Virtual Presentation. ASCO/ASH Symposium 2009. **Abstract**

Slides from a presentation at ASCO 2009

Assessment of Allogeneic HCT in Older Patients with AML and MDS: A CIBMTR Analysis

McClune B et al.

*ASCO/ASH Symposium 2009;The Best of ASH
Special & Plenary Virtual Presentation.*

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Introduction

- Median age at diagnosis of acute myelogenous leukemia (AML) and myelodysplastic syndrome (MDS) is > 65 years.
- Five-year overall survival for patients with AML who are ≥ 60 years old is 6.6% (*Blood* 2006;108:63).
- The outcome with standard chemotherapy is worse in older patients, but allogeneic hematopoietic stem cell transplantation (HCT) can be curative.
- **Current study objectives:**
 - Determine the impact of age on outcomes for older patients with AML and MDS undergoing transplantation

Source: McClune B et al. ASCO/ASH Symposium 2009, Best of ASH

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Methods

- Study population: patients referred to the Center for International Blood & Marrow Transplant Research (CIBMTR) between 1995 and 2005 undergoing non-myeloablative HCT
- ≥ 40 years old with MDS (n=535) or AML (n=545) in 1st complete remission
- **Reduced intensity or non-myeloablative HCT**
- Matched related donor or unrelated donor
- Primary endpoints: overall survival, leukemia-free survival, treatment-related mortality (TRM), relapse, engraftment, acute and chronic GVHD (aGVHD/cGVHD)
- Retrospective data review including multivariate modeling with age in all models
 - Four age groups were analyzed: 40-54; 55-59; 60-64; ≥ 65 yrs

Source: McClune B et al. ASCO/ASH Symposium 2009, Best of ASH

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Outcomes of Nonmyeloablative HCT in Patients with AML (n=545)

Endpoint	Range across all age groups	P-value* (multivariate analysis)
Overall survival at 2 years	34% - 50%	0.06
Leukemia-free survival at 2 years	31% - 43%	0.15
Treatment-related mortality at 1 yr	18% - 35%	0.66
Relapse at 2 yrs	29% - 37%	0.87
Neutrophil recovery at 28 days	>80%	0.14
Acute GVHD	31% - 36%	0.96
Chronic GVHD	41% - 53%	0.30

* P-values apply to differences in the particular endpoints based only on age.

Source: McClune B et al. ASCO/ASH Symposium 2009, Best of ASH

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Outcomes of Nonmyeloablative HCT in Patients with MDS (n=535)

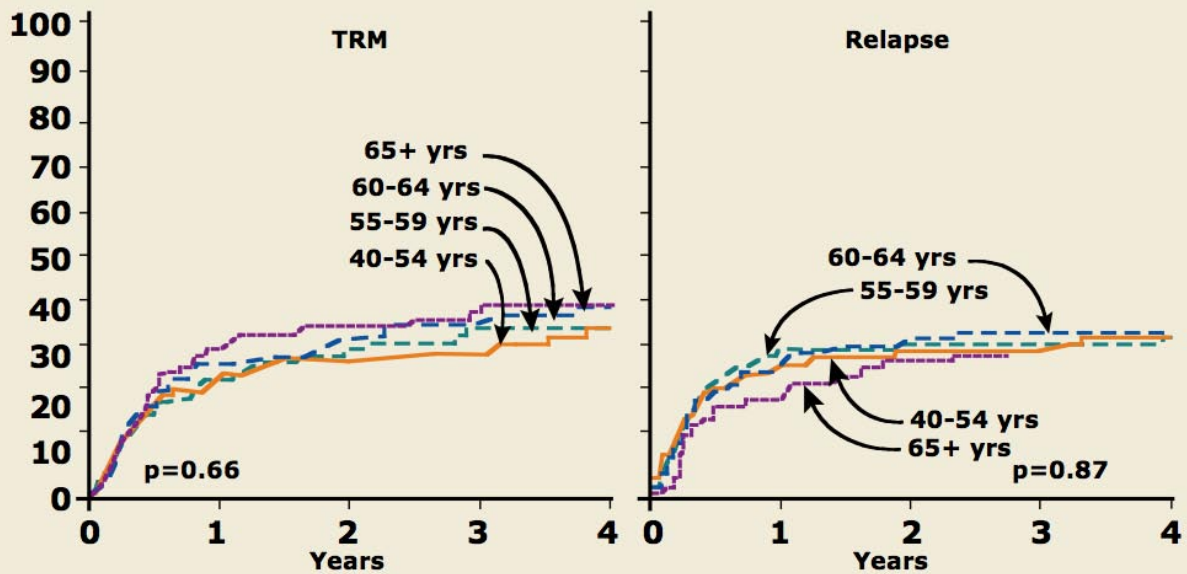
Endpoint	Range across all age groups	P-value* (multivariate analysis)
Overall survival at 2 years	35 - 45%	0.37
Leukemia-free survival at 2 years	32% - 39%	0.68
Treatment-related mortality at 1 yr	18% - 35%	0.66
Relapse at 2 yrs	29% - 37%	0.87
Neutrophil recovery at 28 days	>80%	0.25
Acute GVHD	31% - 36%	0.89
Chronic GVHD	37% - 45%	0.79

* P-values apply to differences in the particular endpoints based only on age.

Source: McClune B et al. ASCO/ASH Symposium 2009, Best of ASH

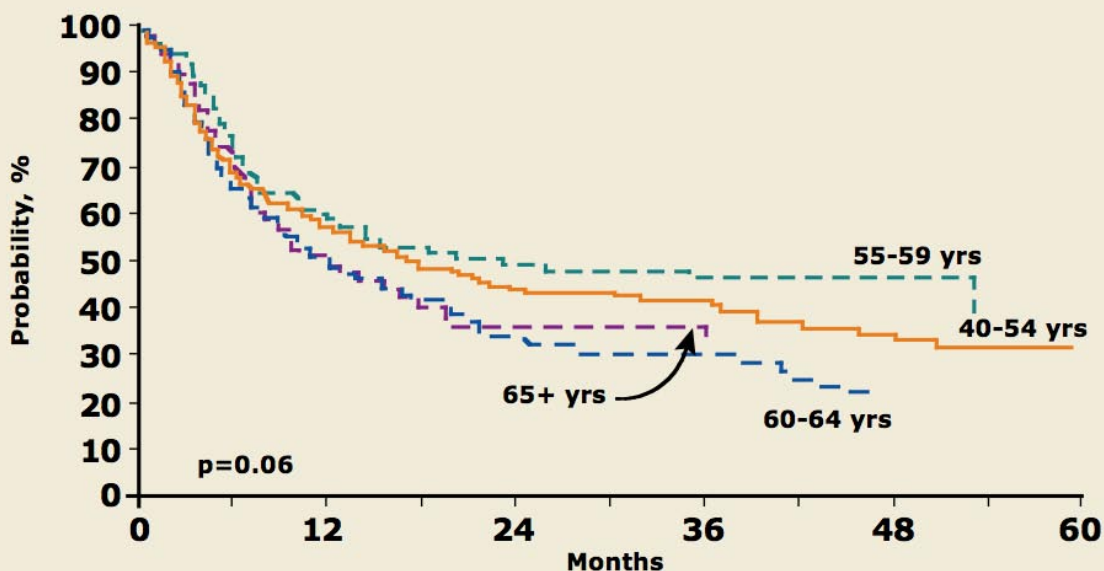
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TRM and relapse of patients 40+ years receiving nonmyeloablative allogeneic HSCT for AML and MDS, 1995-2005, by age



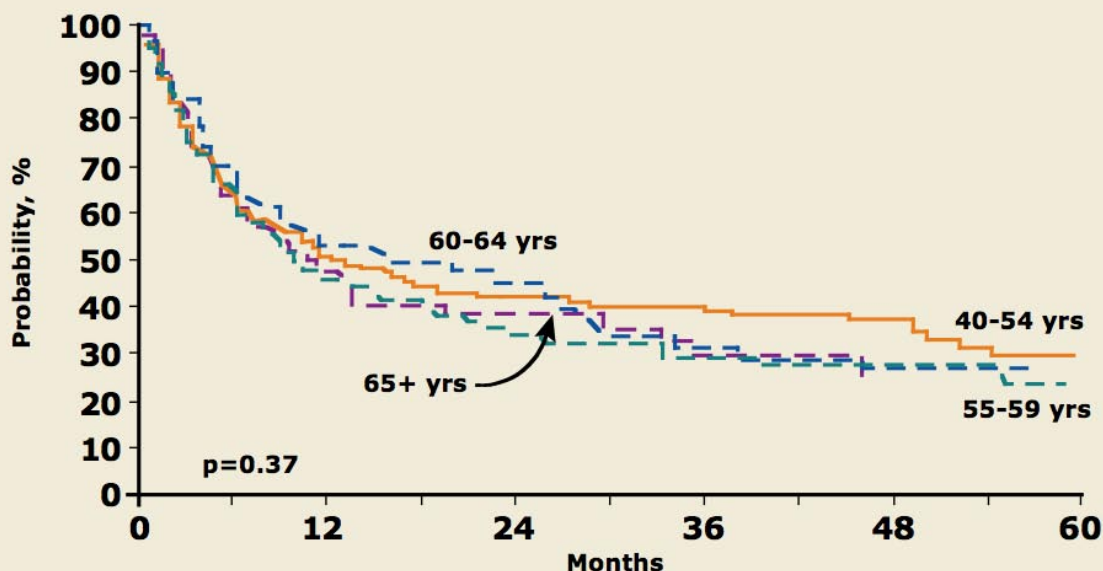
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Overall survival of patients 40+ years receiving nonmyeloablative allogeneic HSCT for AML in CR1, 1995-2005, by age



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Overall survival of patients 40+ years receiving nonmyeloablative allogeneic HSCT for MDS, 1995-2005, by age



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Summary and Conclusions

- Multivariate analysis demonstrated equivalence in outcomes of non-myeloablative HCT in older versus younger patients:
 - Treatment related mortality (18% - 35%)
 - Two-year relapse (29% - 37%)
 - Acute GVHD (31% - 36%)
 - Chronic GVHD (MDS, 37% - 45%; AML, 41% - 53%)
 - Comparable two-year leukemia-free survival (MDS, 32% - 39%; AML, 31% - 43%)
- Age is not a contraindication to non-myeloablative allogeneic HCT

Source: McClune B et al. ASCO/ASH Symposium 2009, Best of ASH

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