

Causes of death in 5- and 10-year survivors after allogeneic hematopoietic cell transplantation.

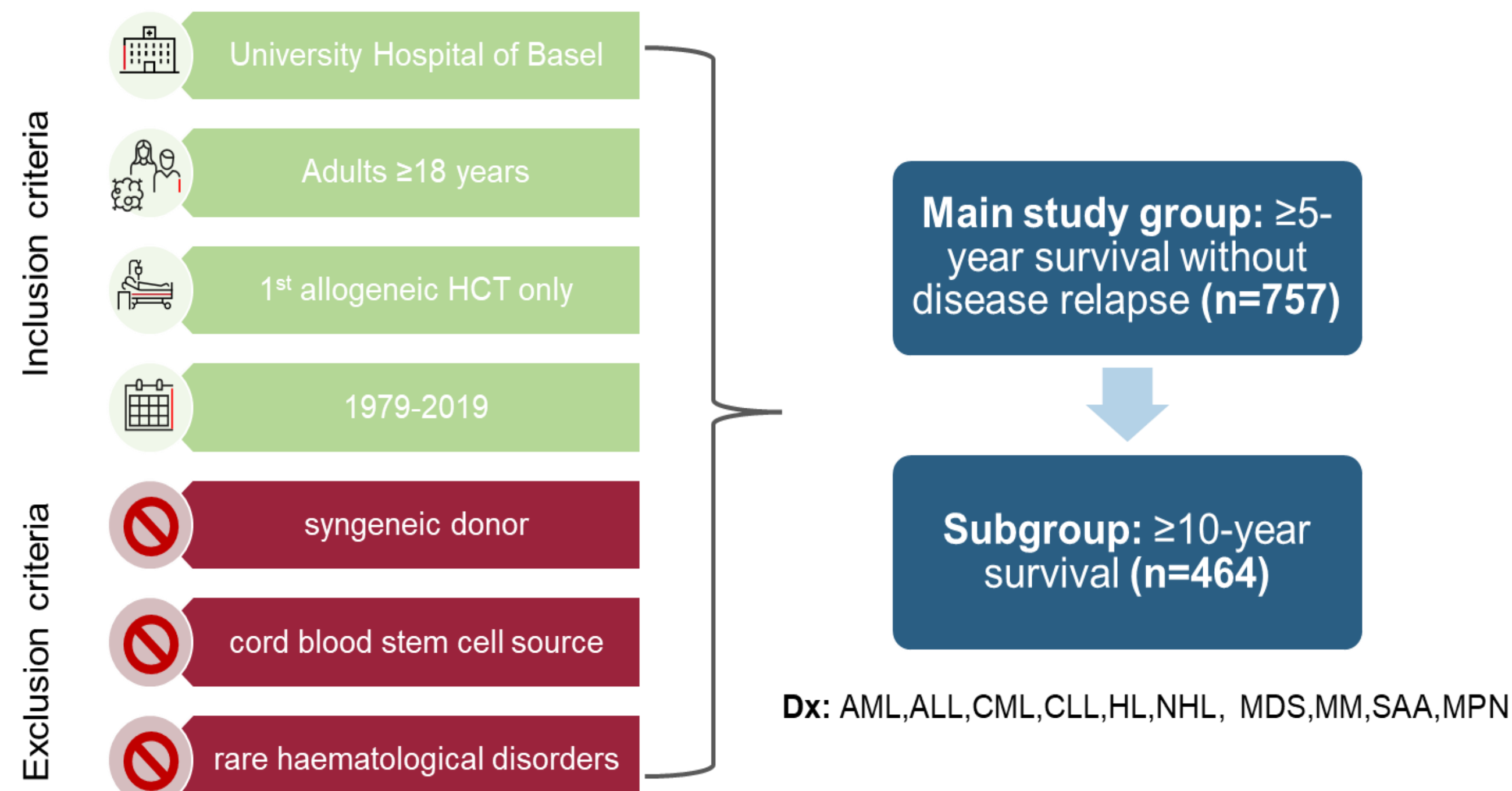
Clinical hemato-oncology

Aicher M, Mathew R, Drexler B, Stelmes A, van den Berg J, Matteazzi F, Heim D, Steegmüller B, Baldomero H, Passweg JR, Halter JP
Hematology, University Hospital Basel, Switzerland

INTRODUCTION

- Allogeneic hematopoietic cell transplantation (allo-HCT) can be curative for malignant and benign hematological diseases
- Data on long-term outcomes of long-term survivors are limited
- There is a growing population of survivors
- Aim:** Identify predictors of mortality among survivors at ≥ 5 and ≥ 10 years after allo-HCT

METHODS



Analysis:

- Kaplan–Meier methods:** Overall survival (OS)
- Multivariable Cox regression:** Predictors of mortality including age, conditioning, donor type, stem cell source, and chronic graft-versus-host disease (cGvHD)

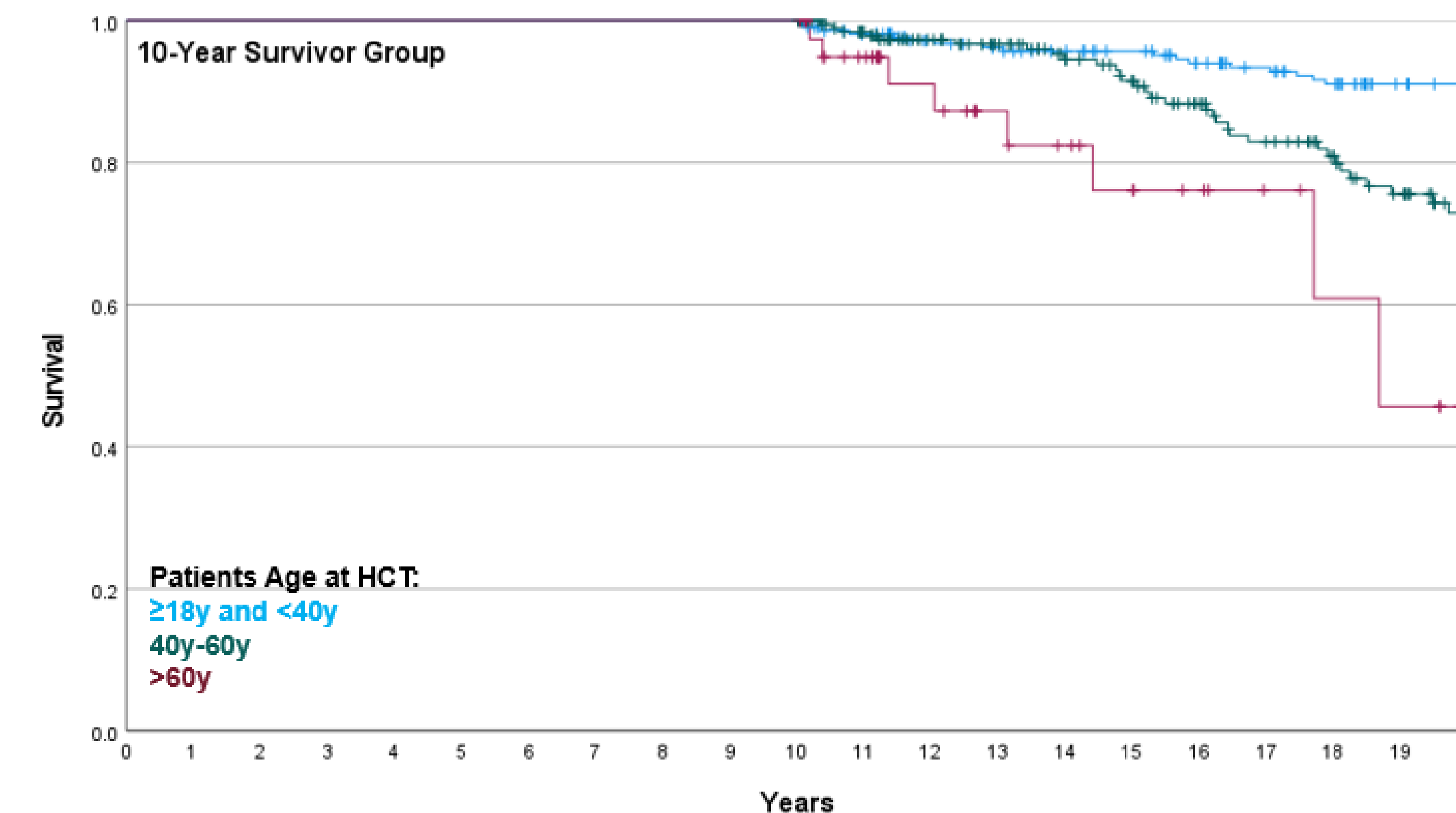
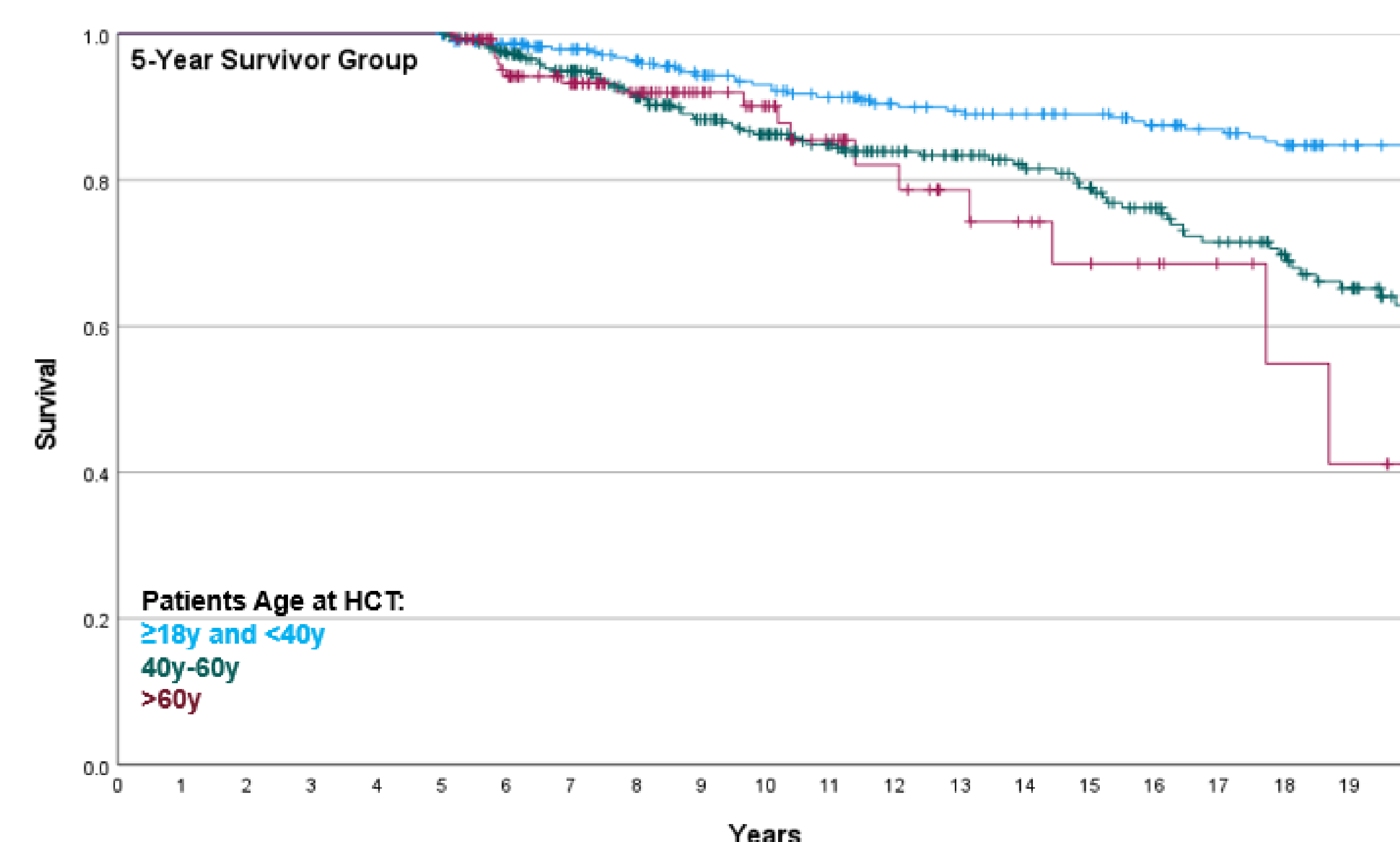
CONCLUSION

- Long-term survival after allo-HCT is favorable
- Age and severe cGvHD drive late mortality
- Non-relapse causes dominate over time
- Lifelong survivorship program is essential

RESULTS

- Median follow-up:** 11.9 years
- 20y OS in ≥ 5 -year survivors:** 74%
- 20y OS in ≥ 10 -year survivors:** 83%
- Relapse-free survival:** > 75% in both survival groups.

Overall survival by patients age at HCT

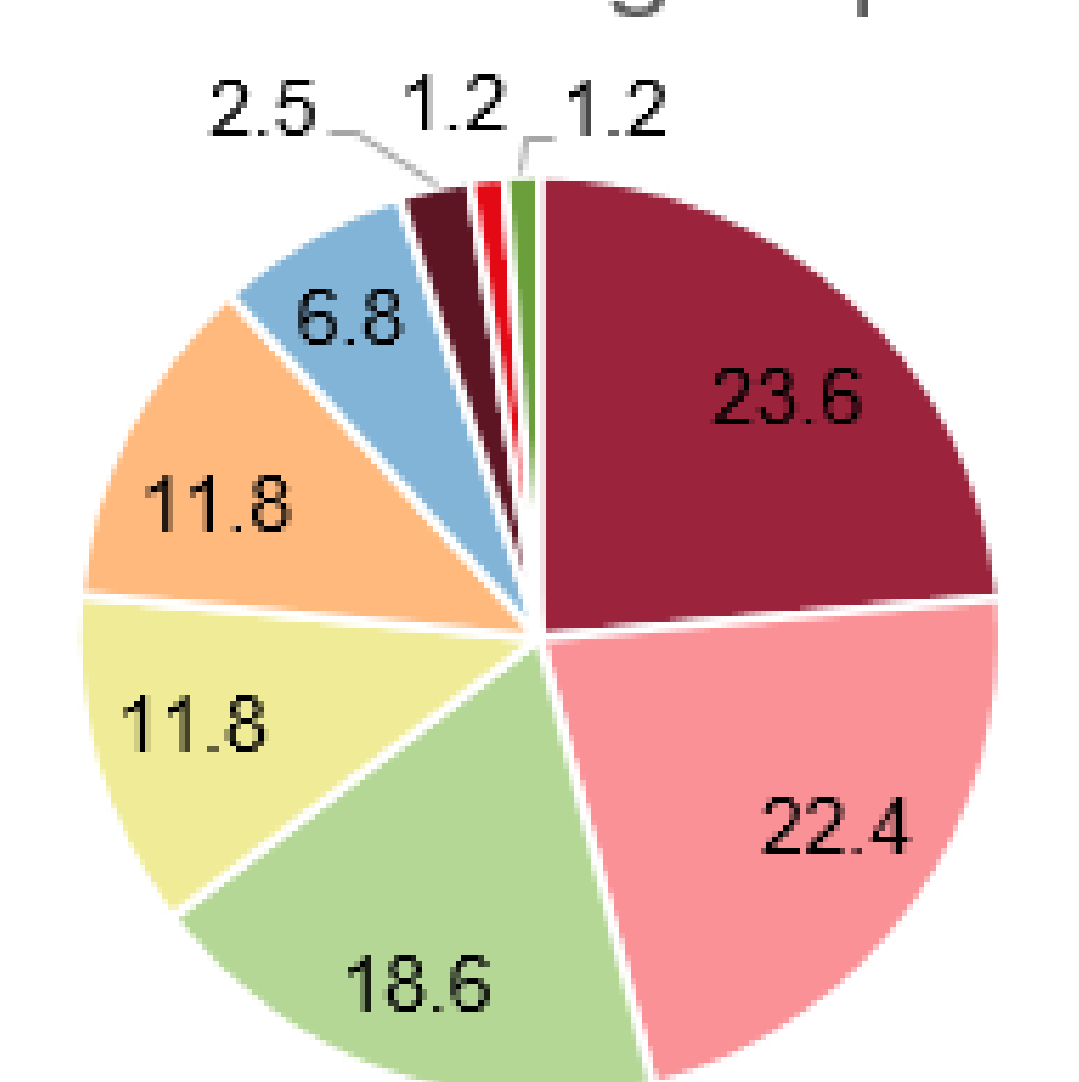


Predictors of late mortality

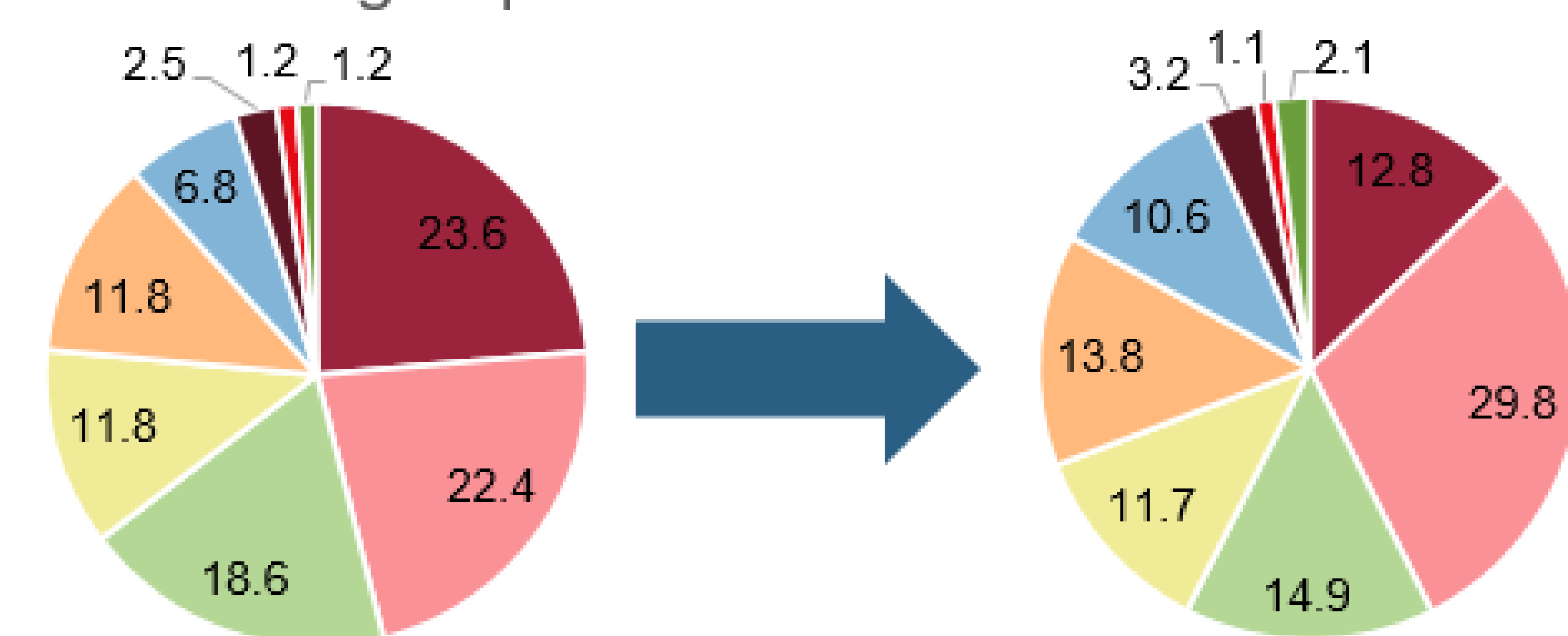
Variable	≥ 5 -Year Survivors HR	≥ 10 -Year Survivors HR
Age at HCT		
≥ 18 and <40	1	1
40-60	2.5	3.3
>60	2.1	6.9
cGvHD		
None	1	1
Mild or limited	0.9	0.9
Moderate	0.5	0.7
Severe or extensive	1.9	1.8
Conditioning regimen		
Myeloablative	1	-
Nonmyeloablative/Reduced intensity	1.7	-

Shifts in the causes of death

Causes of death: ≥ 5 -year survival group



Causes of death: ≥ 10 -year survivors



- Relapse
- Secondary neoplasm
- GvHD
- Infection
- Cardiovascular disease
- Unknown
- External cause
- Organ failure