

Haploidentical Hematopoietic Stem Cell Transplantation with post Transplant Cyclophosphamide for Patients Over 70 Years

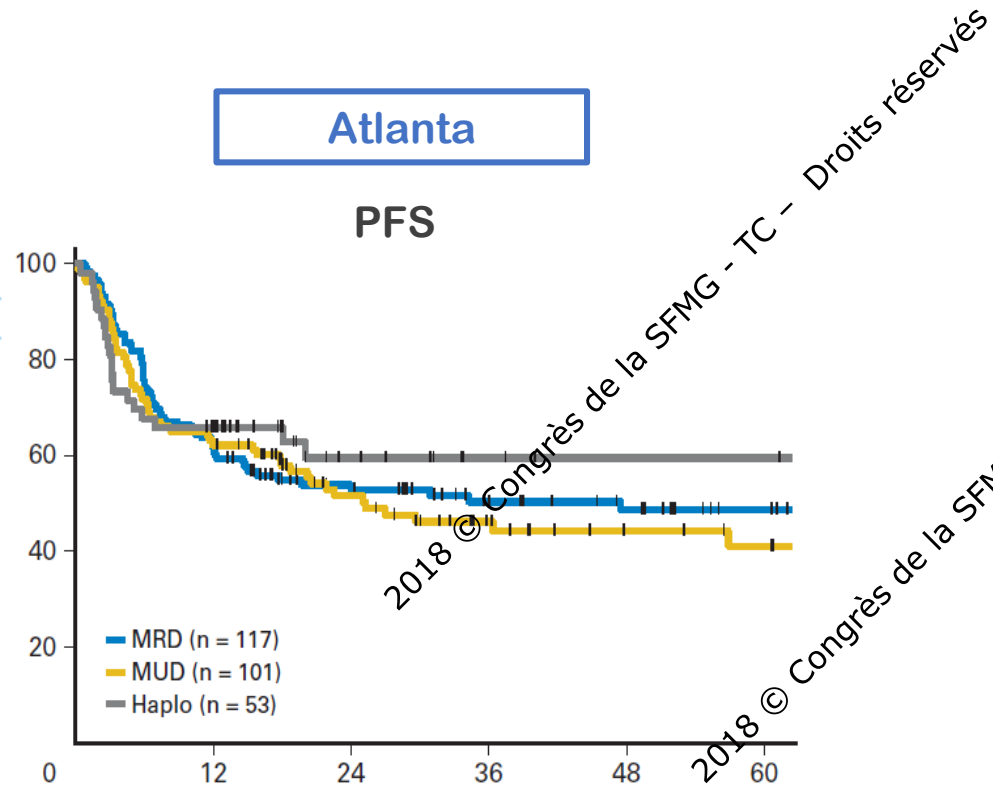
Samia Harbi, MD

23/11/2018 - 18^e Congrès SFGM-TC-Nice



Introduction : Haplo-SCT

- ✓ Low incidence of GVHD using PT-Cy
- ✓ Similar Outcome compared to MRD and UD



Bashey et al. JCO 2013

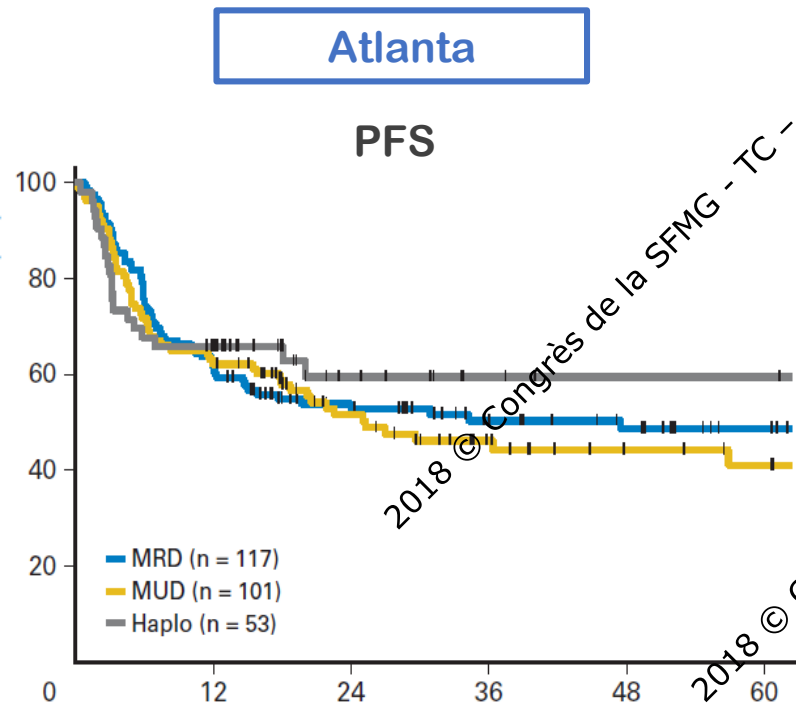
Raiola et al. BBMT 2014

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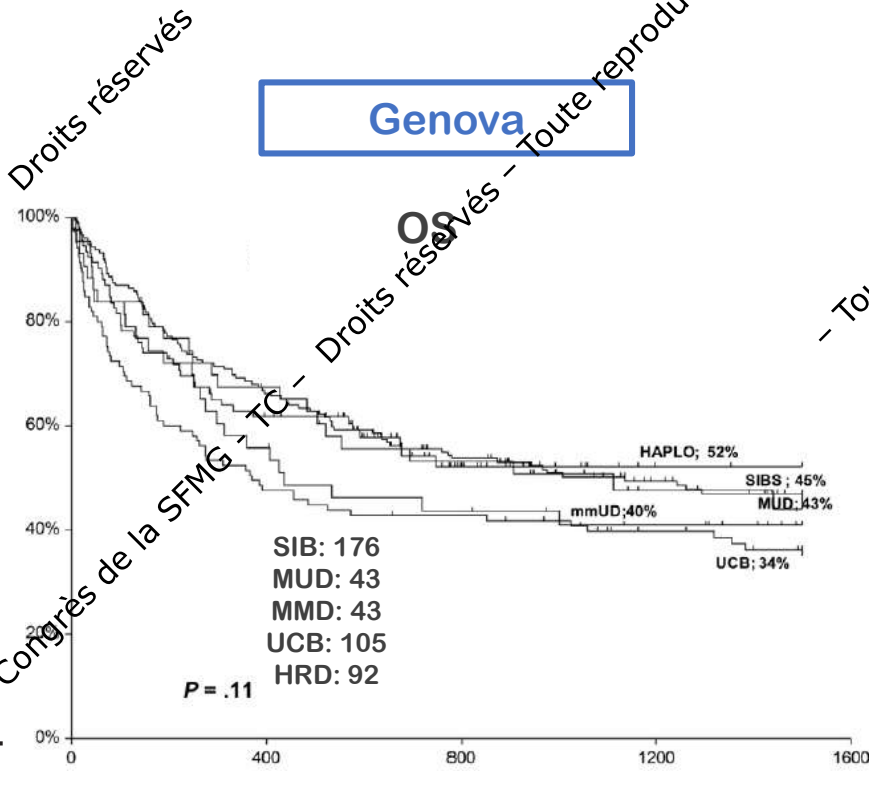
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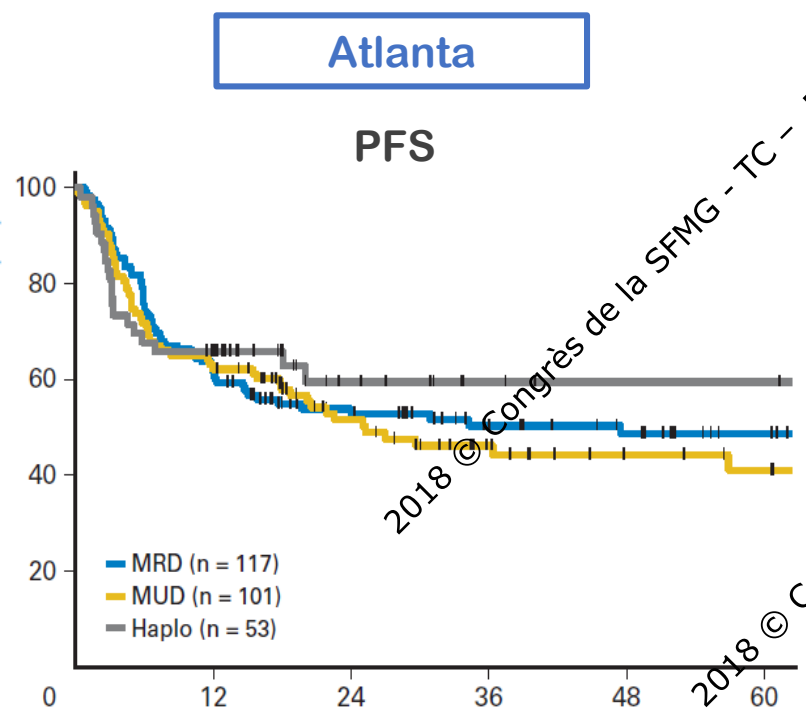
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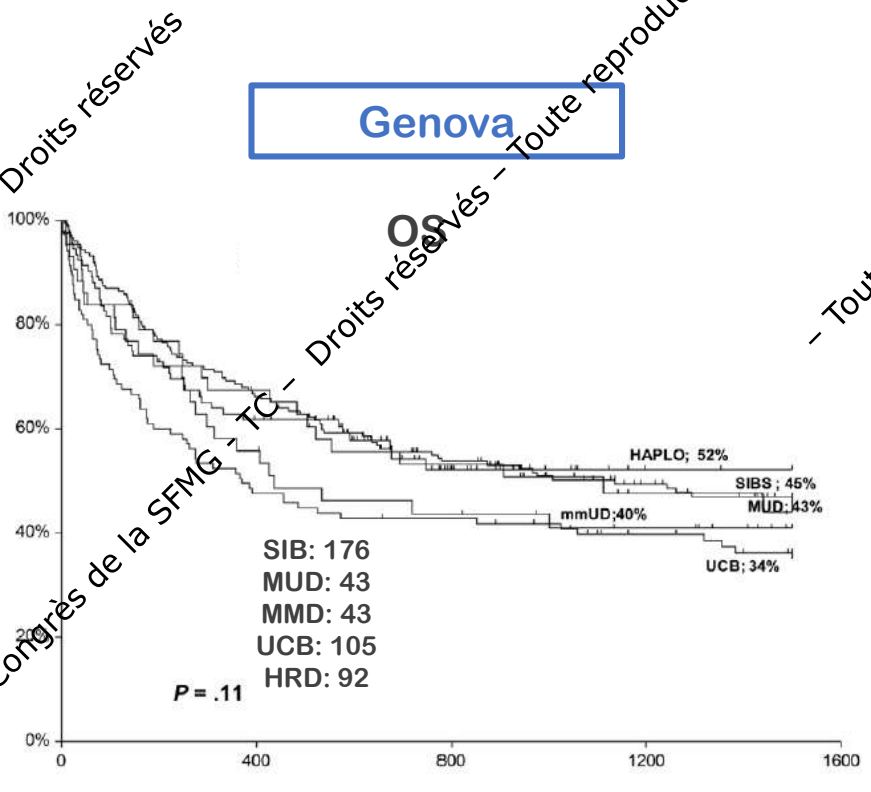
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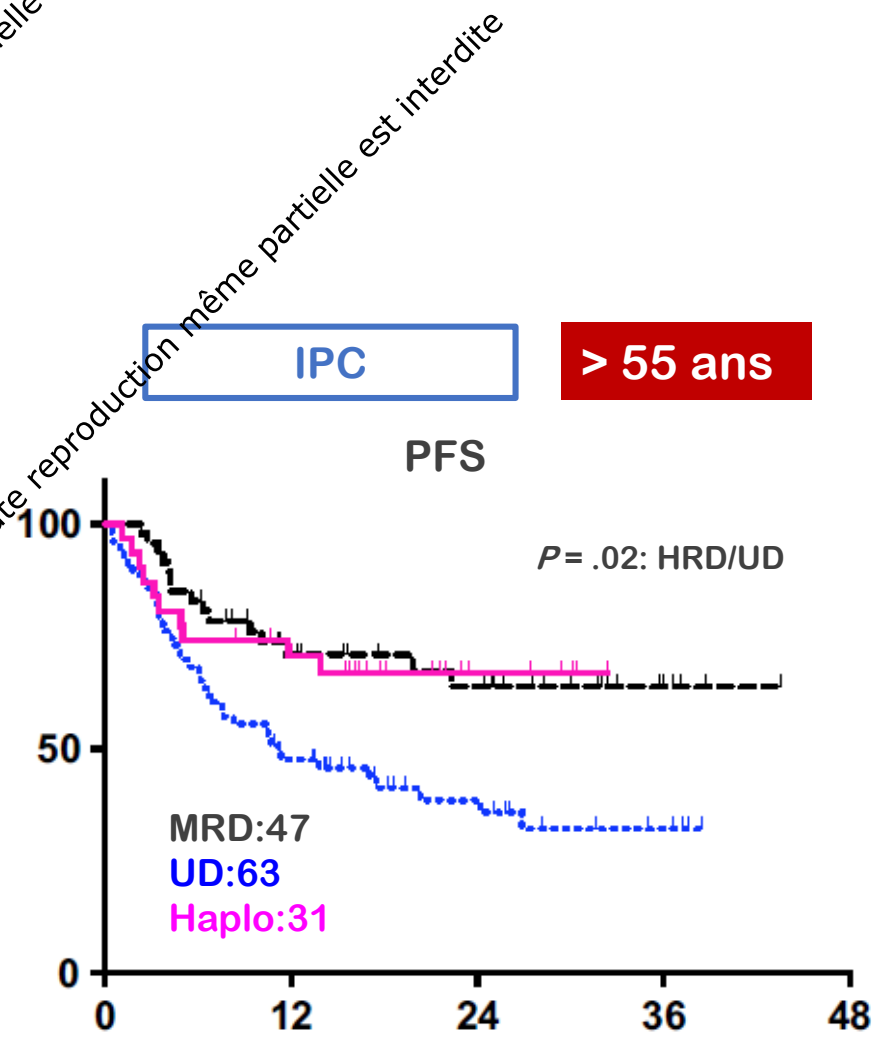
✓ A preferred strategy for older patients?



Bashey et al. JCO 2013



Raiola et al. BBMT 2014



Blaise et al. BBMT 2016

Atlanta

Genova

IPC

> 55 ans

PFS

PFS

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Introduction : Haplo-SCT for Older Patients

Johns Hopkins (N = 271)

- Age (50-75)
- **Bone marrow**
- Cy-Flu-TBI2
- PT-Cy



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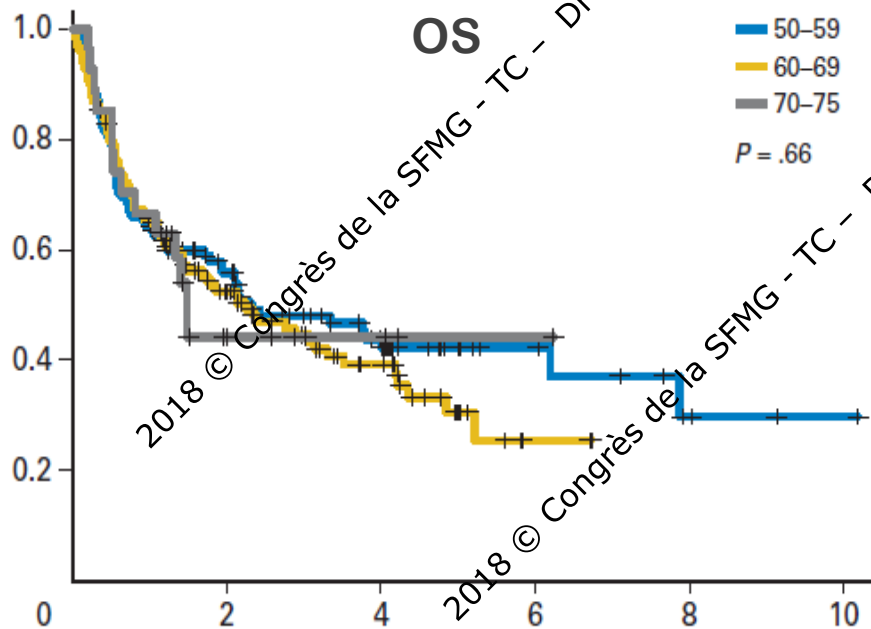
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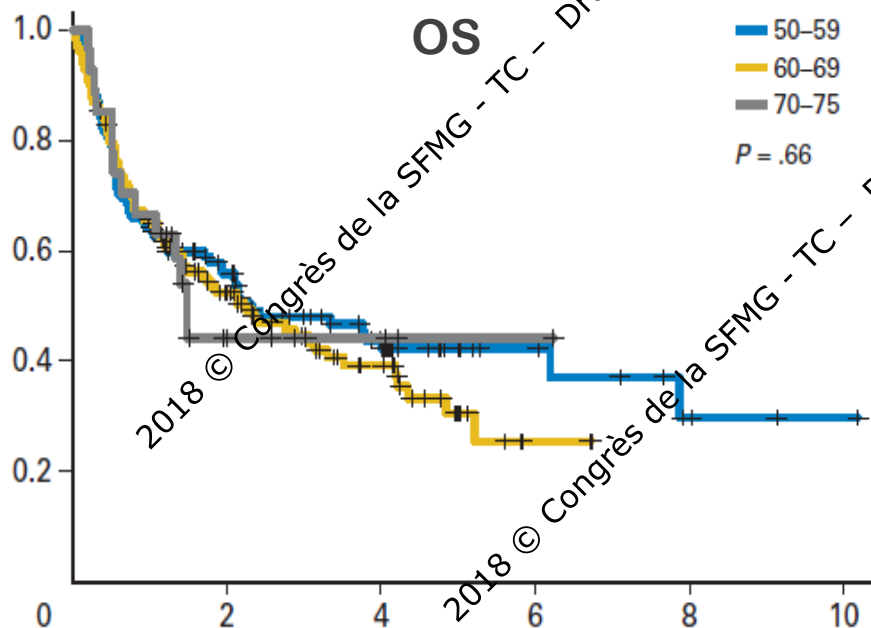
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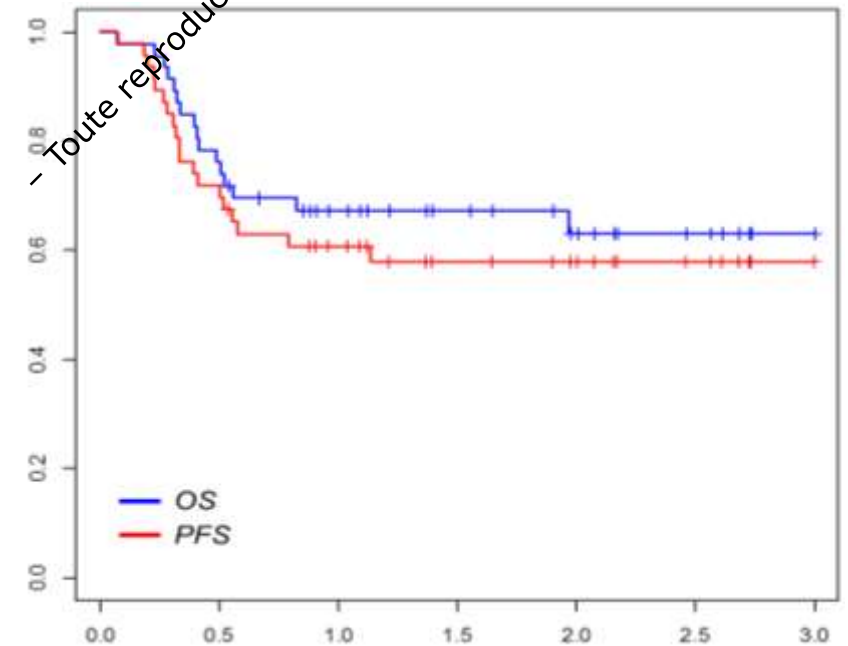
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Kasamon et al. JCO 2015

IPC (N = 46)

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Devillier et al. BJH 2017

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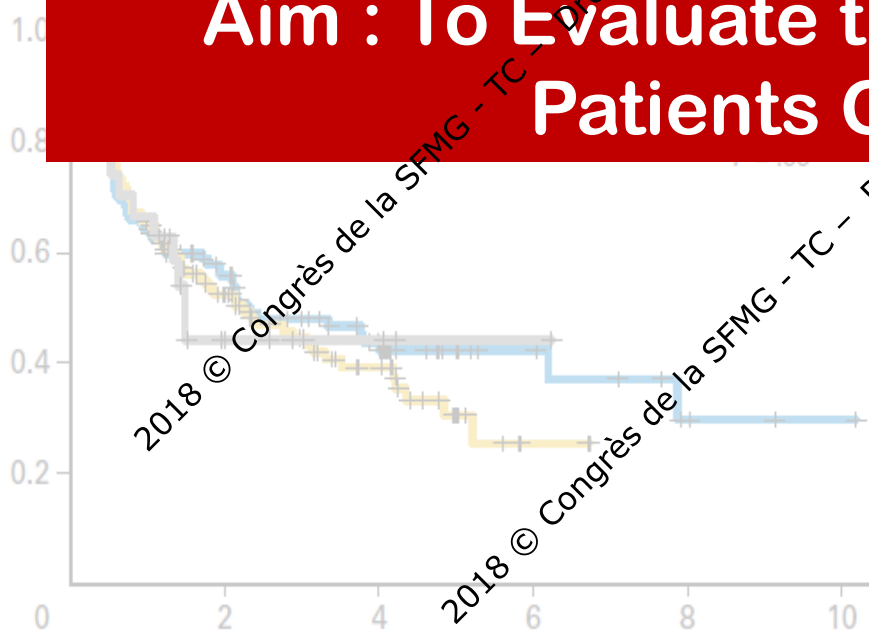


IPC (N = 46)

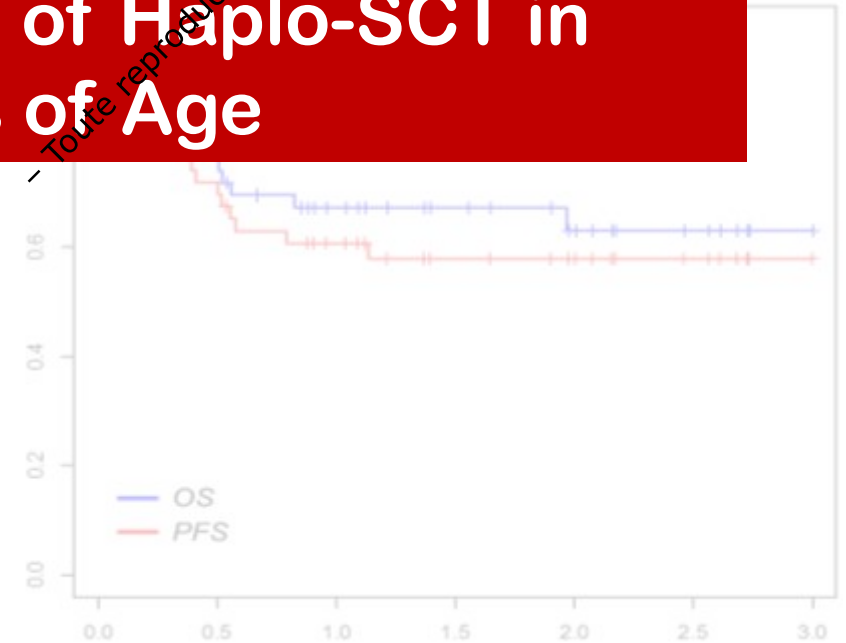
- Age (50-73)
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- Cy-Flu-TBI2
- PT-Cy



Aim : To Evaluate the Feasibility of Haplo-SCT in Patients Over 70 years of Age



Kasamon et al. JCO 2015



Devillier et al. BJH 2017

Patient and Transplant Characteristics

Selection Criteria

- Age \geq 70y
- Haplo-SCT for malignancies
- PT-CY as GVHD prophylaxis
- IPC + ICH
- 2012-2018

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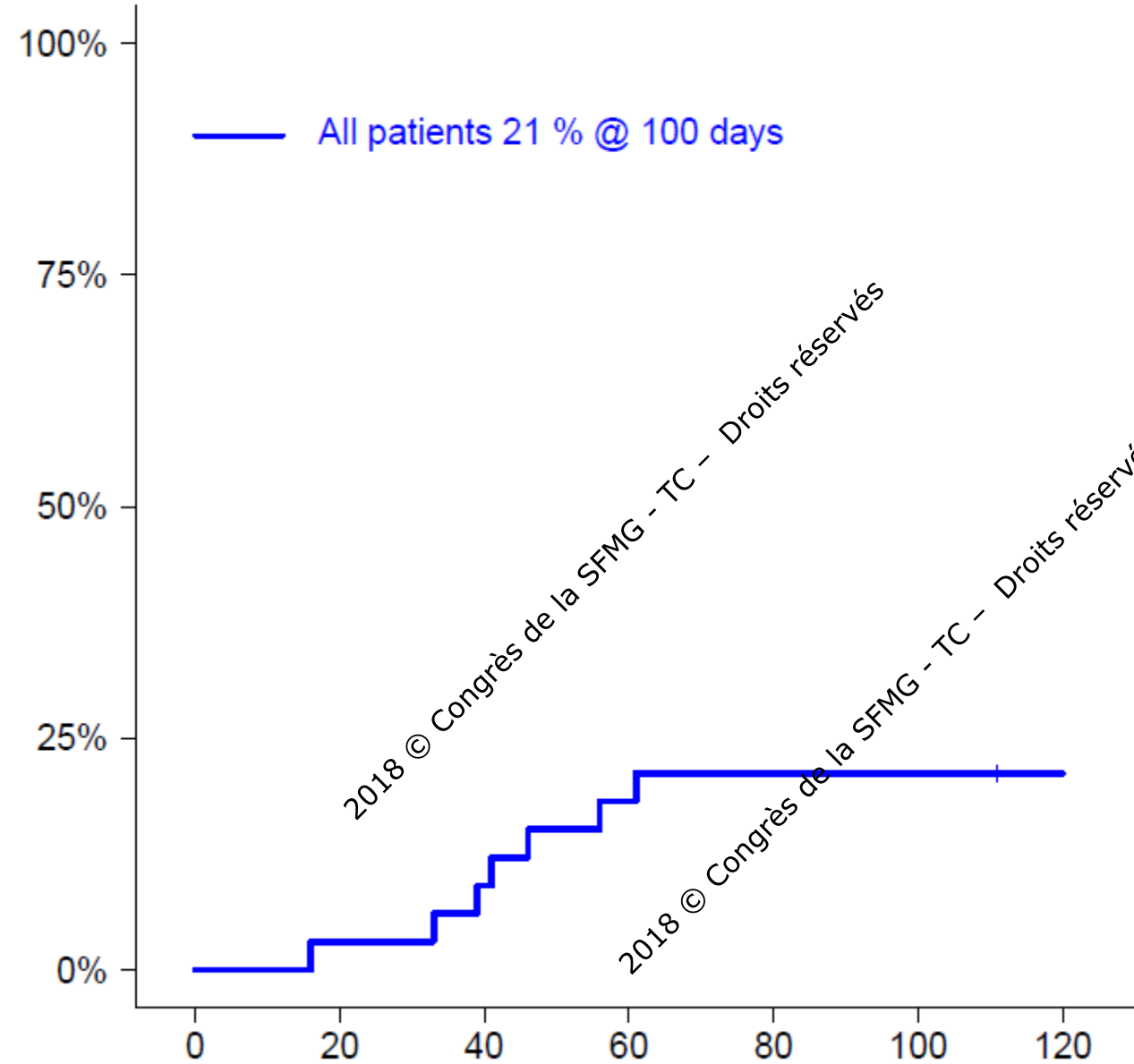
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| All Patients (N = 33) | | |
|-----------------------|----|-----------|
| Age | 71 | (70 - 77) |
| Disease | | |
| <i>AML</i> | 13 | 39% |
| <i>MDS</i> | 13 | 39% |
| <i>MPN</i> | 2 | 6% |
| <i>ALL</i> | 2 | 6% |
| <i>NHL</i> | 3 | 9% |
| High DRI | 10 | 30% |
| HCT-CI \geq 3 | 21 | 64% |
| NMAC FluCyTBI | 27 | 82% |
| PBSC | 30 | 91% |
| Child | 31 | 94% |
| 2nd Allo | 2 | 6% |

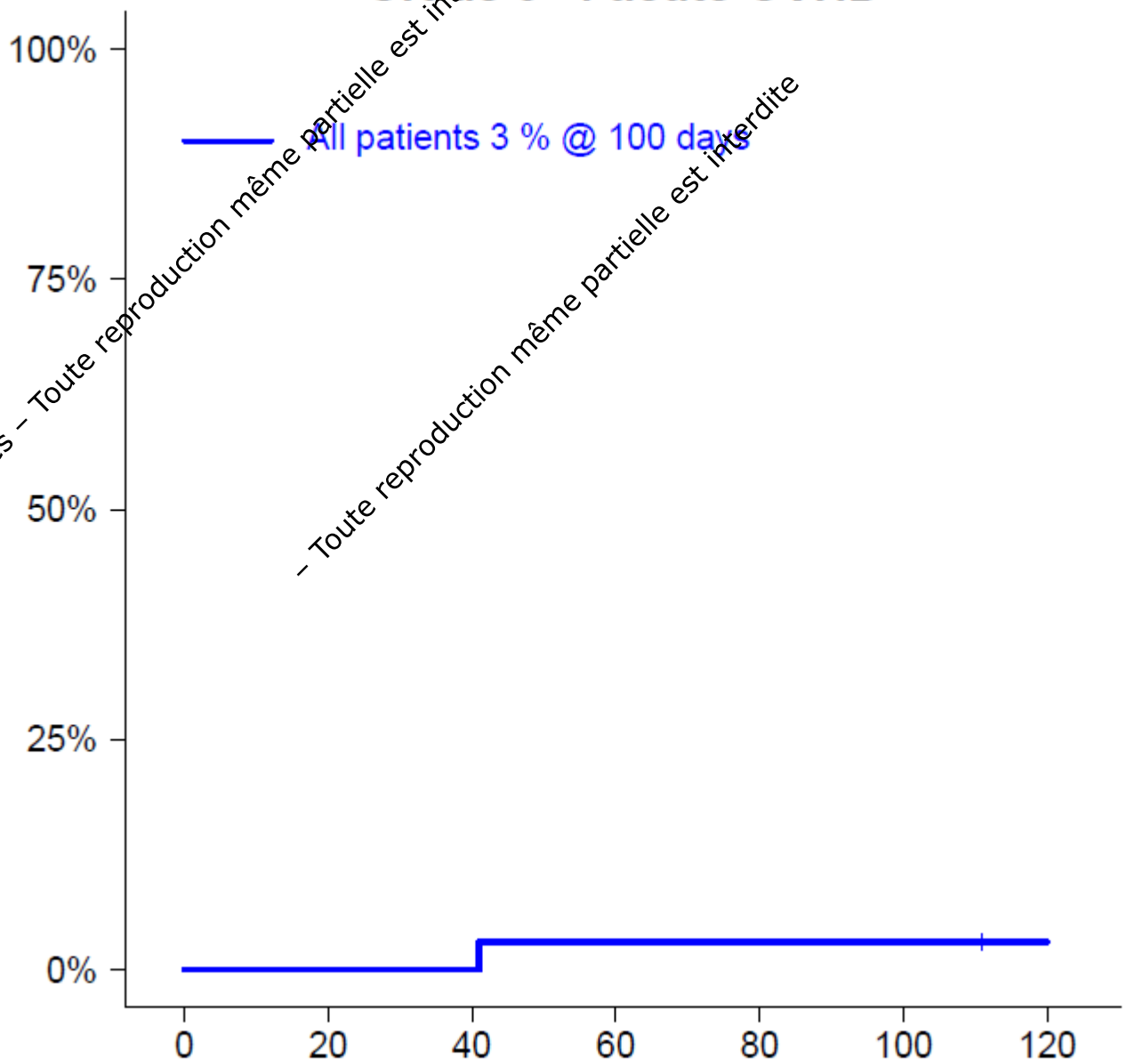
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Results : acute GVHD

Grade 2-4 acute GVHD

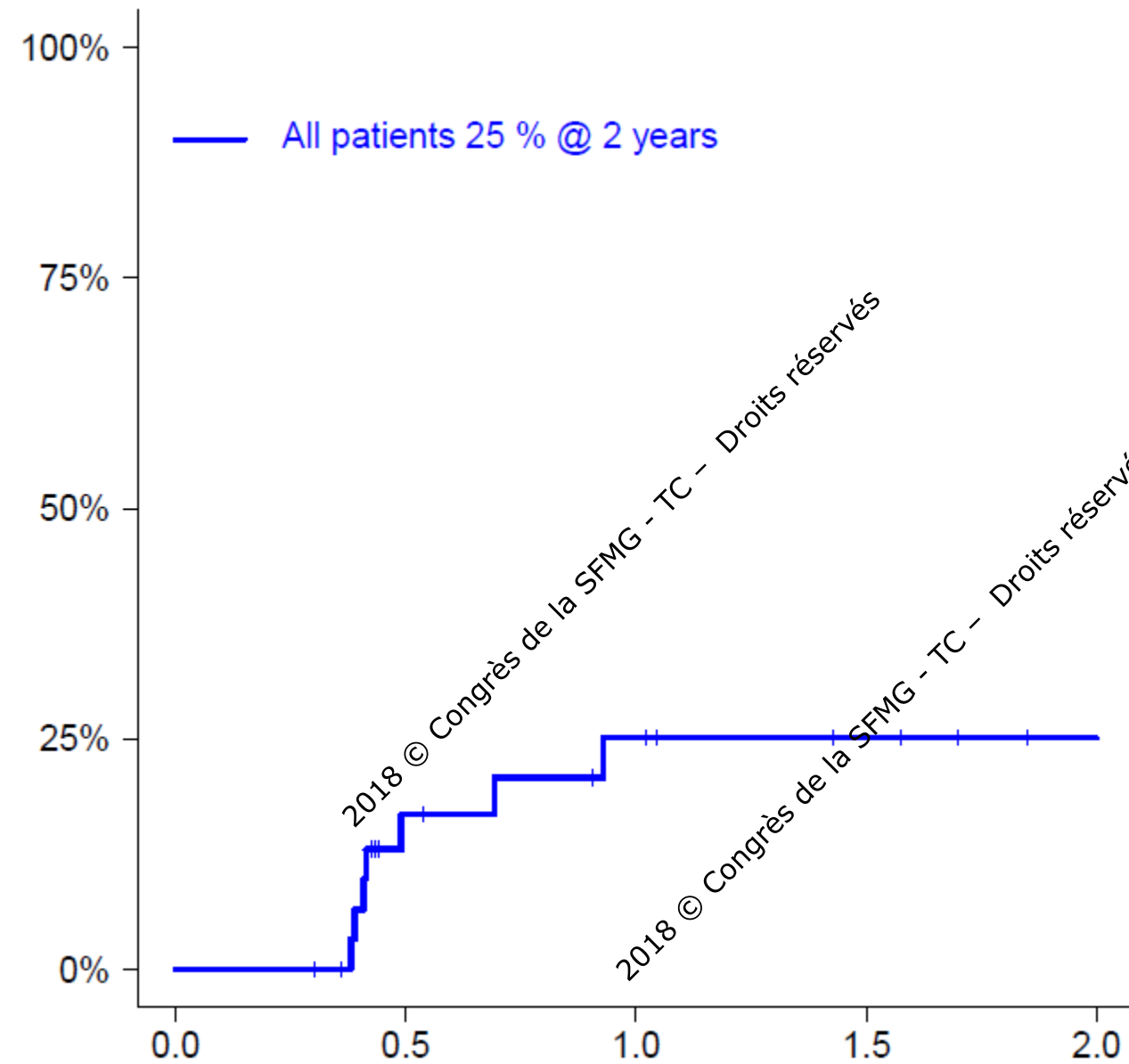


Grade 3-4 acute GVHD

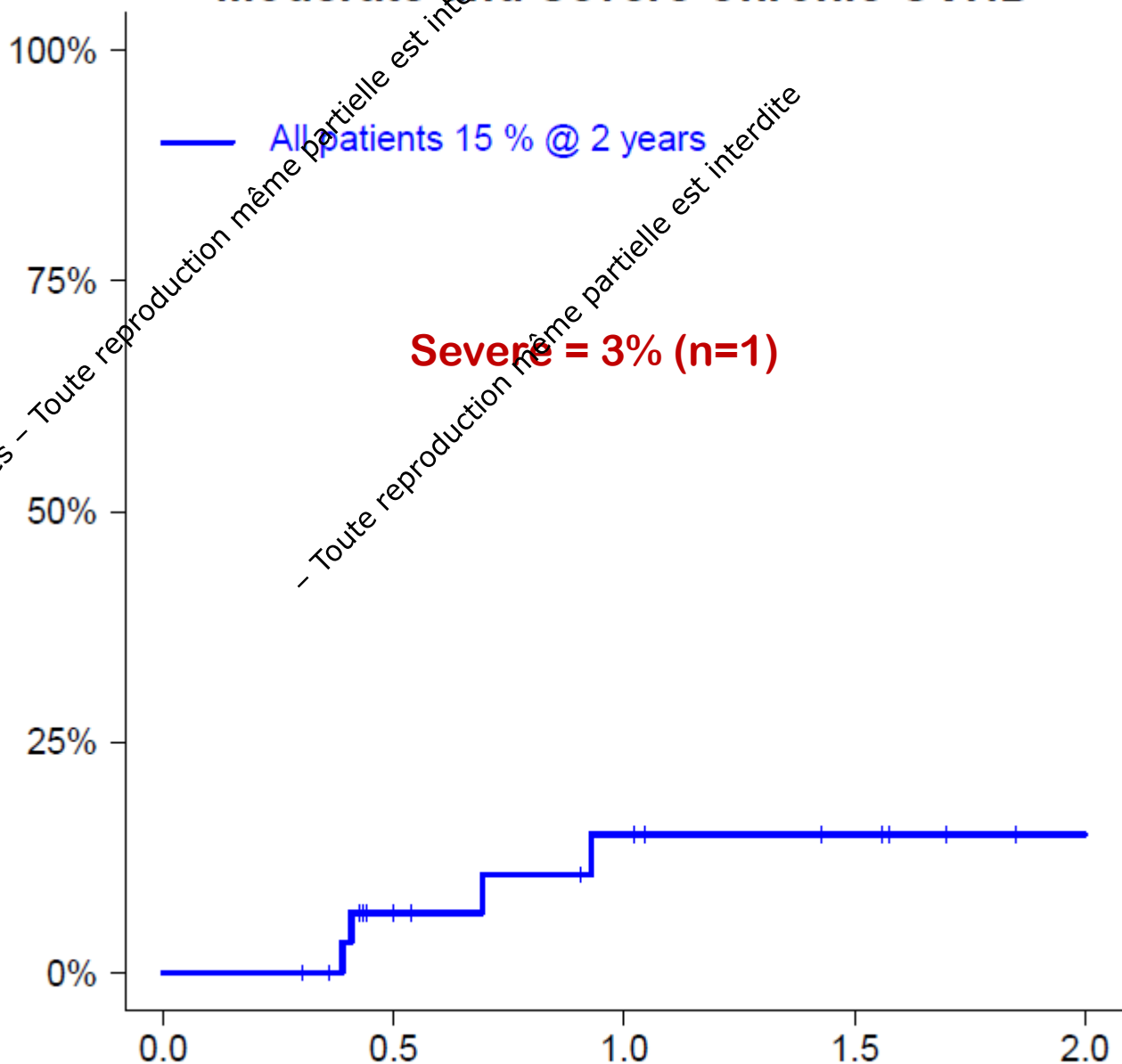


Results : chronic GVHD

Chronic GVHD

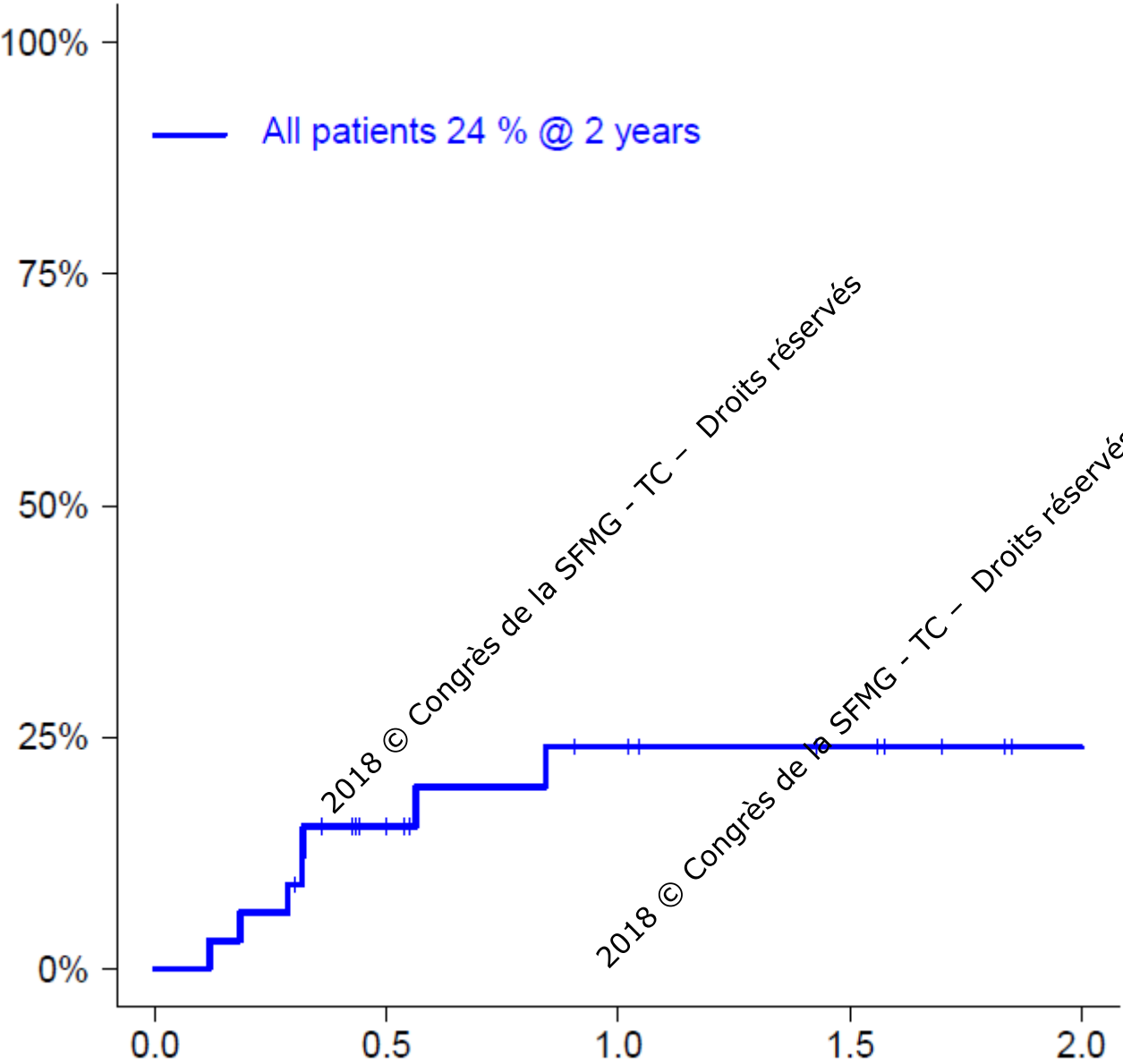


Moderate and Severe Chronic GVHD

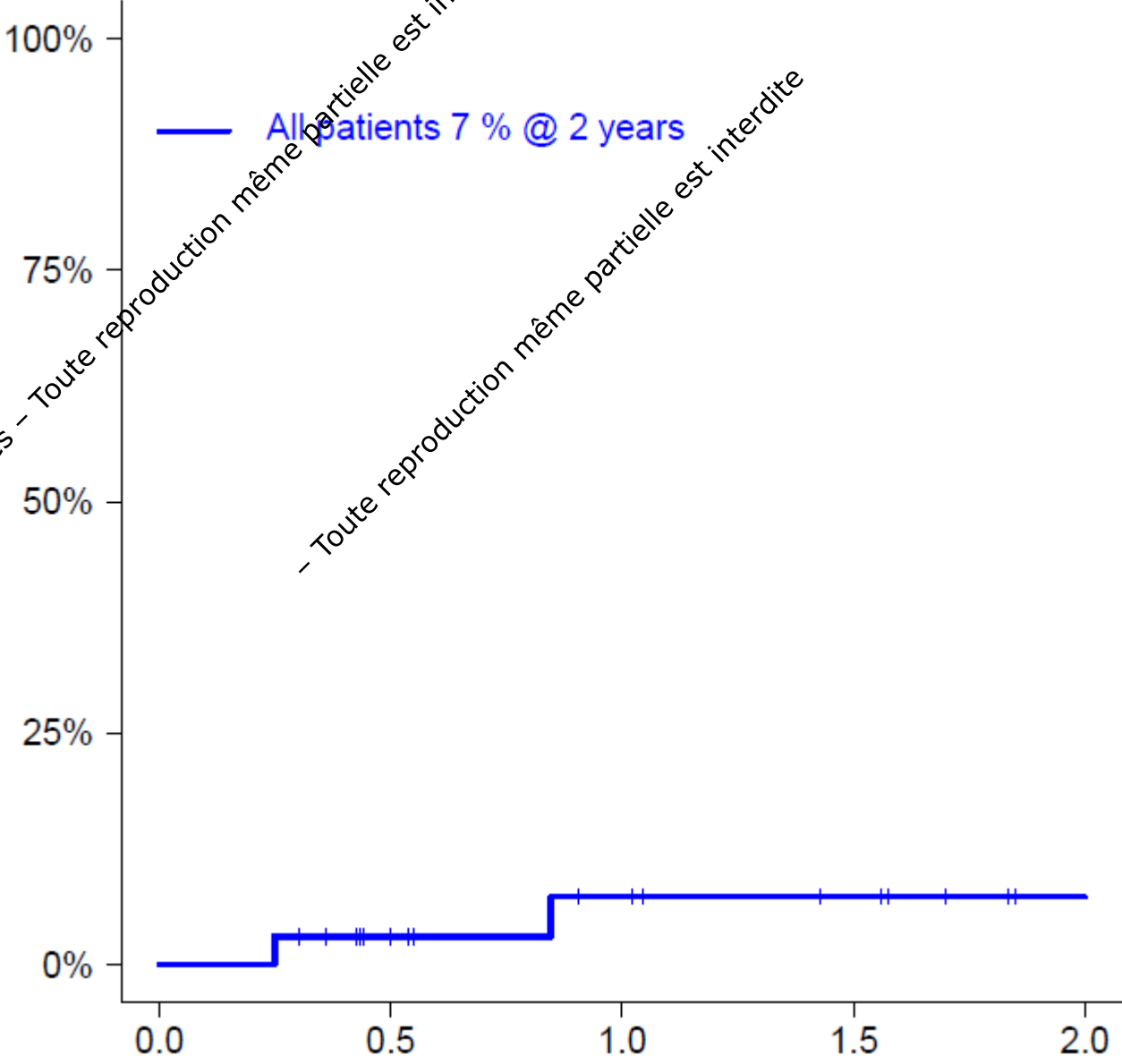


Results : NRM and Relapse

NRM



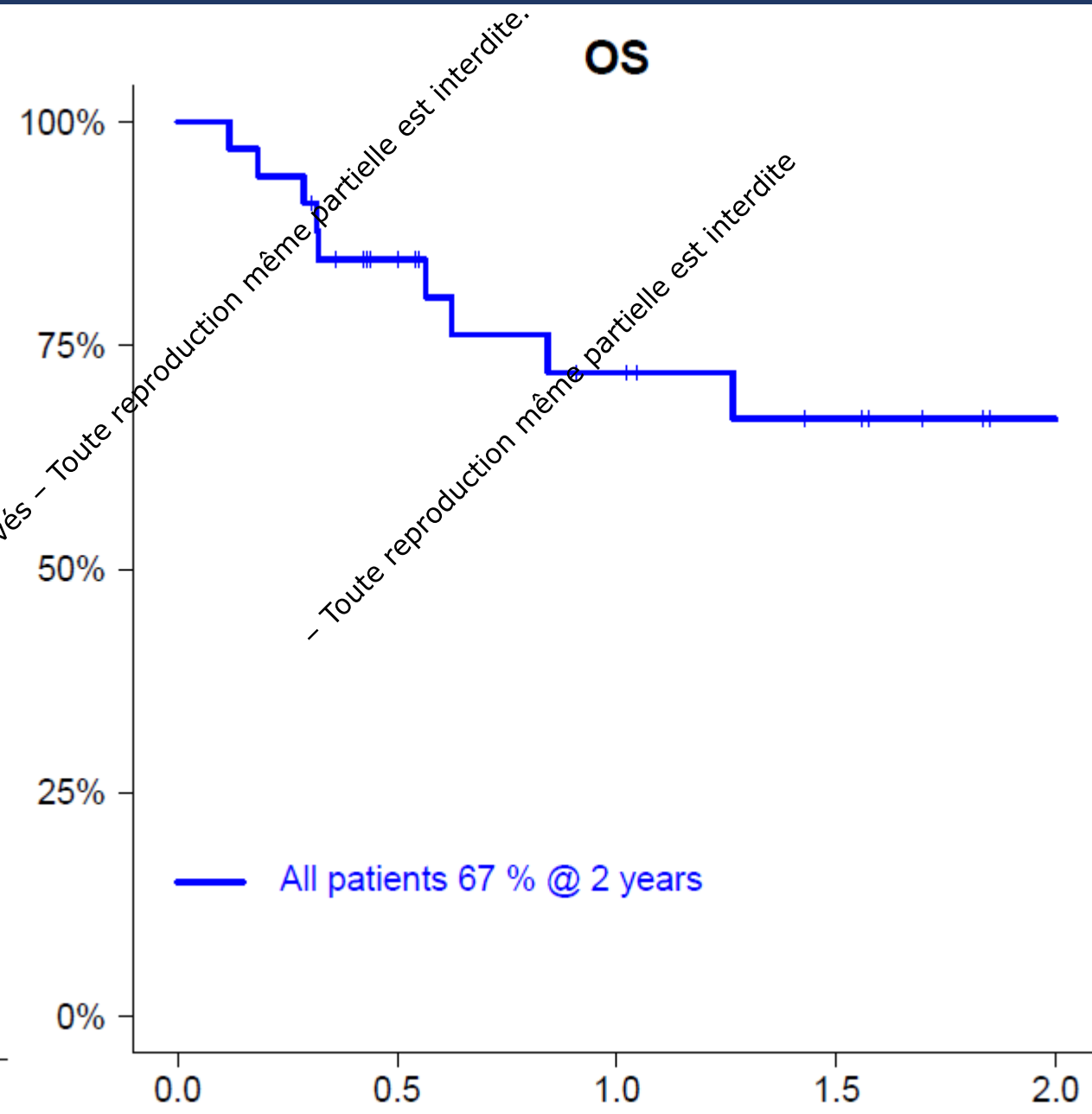
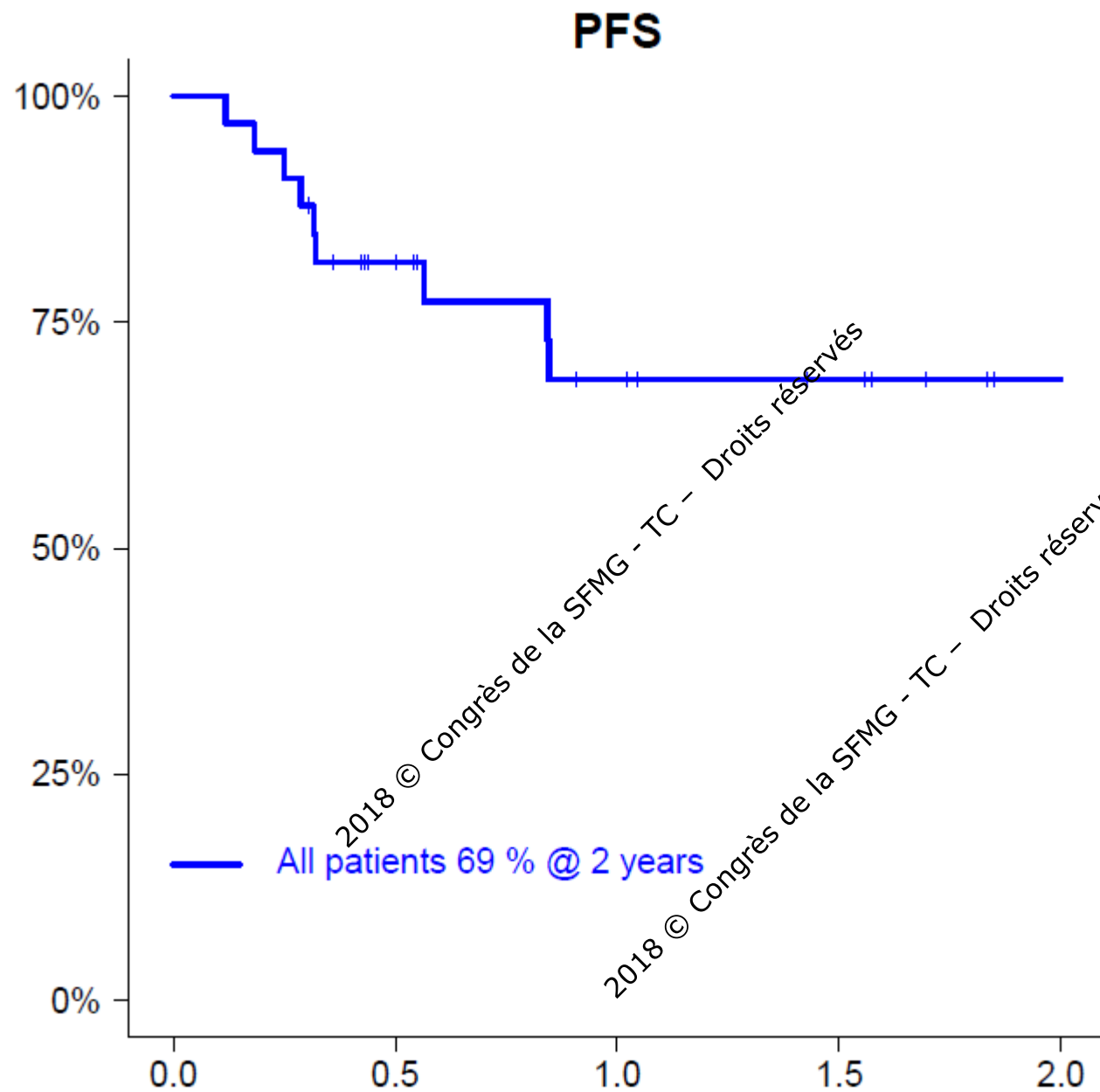
Relapse



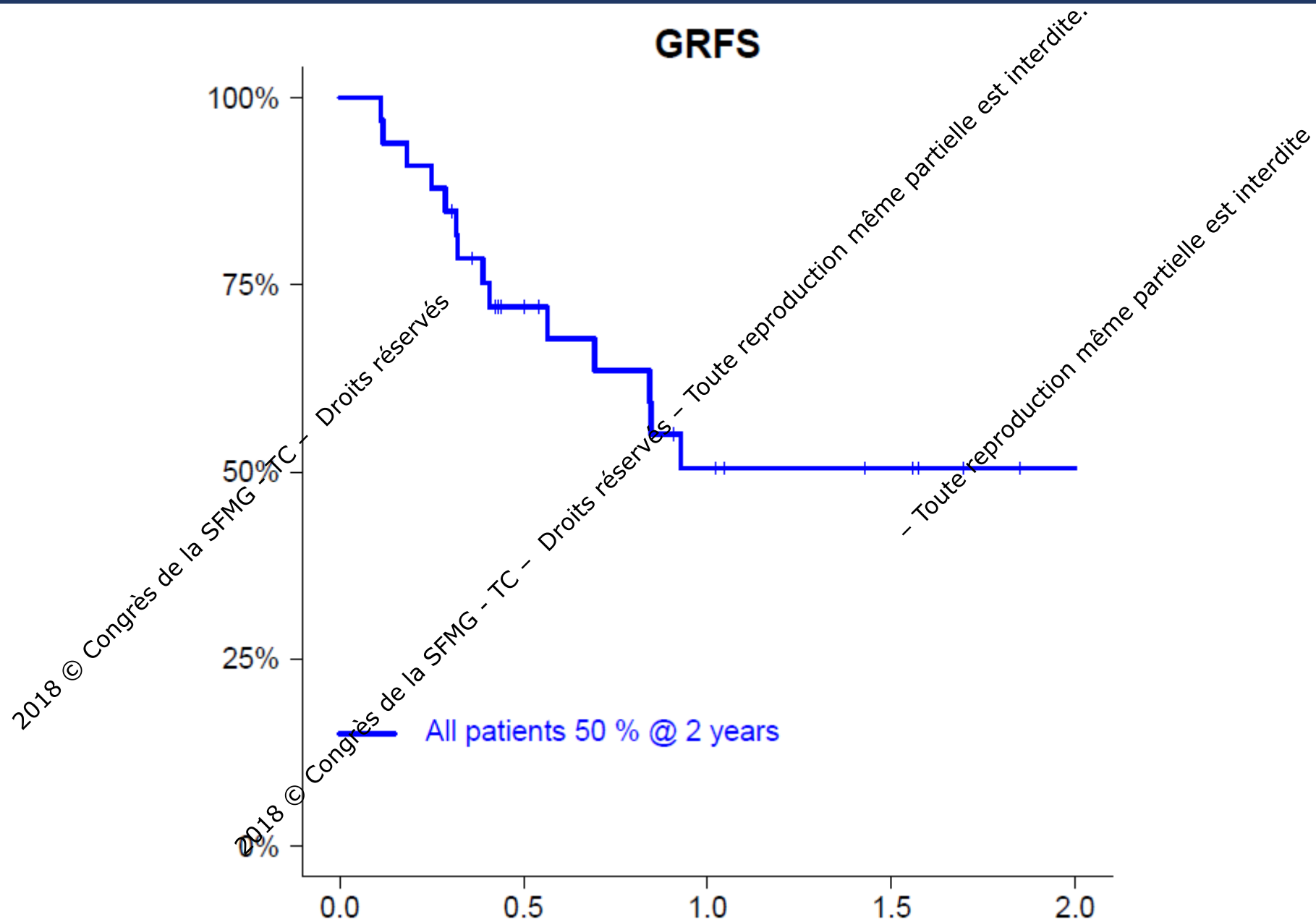
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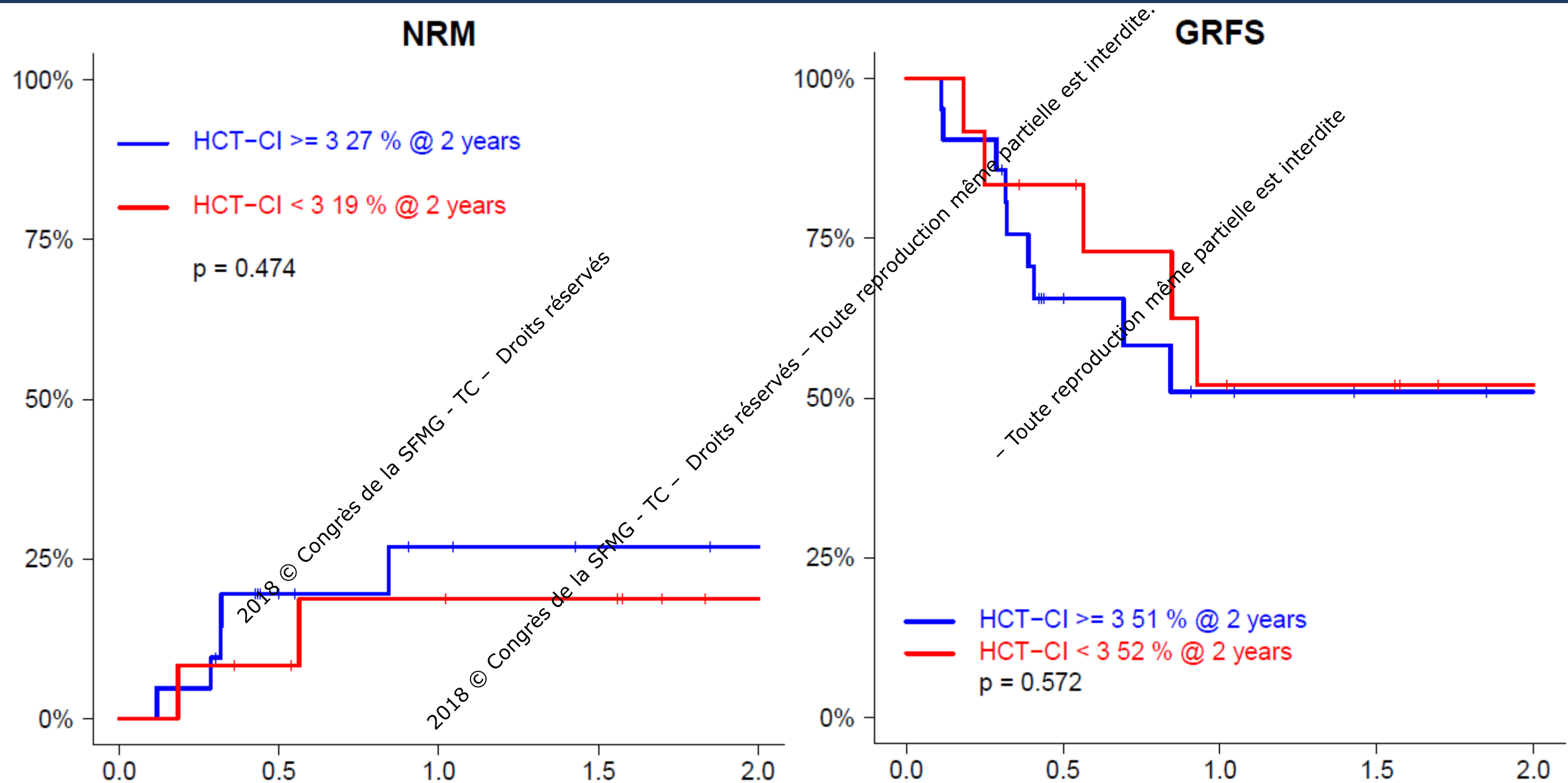
Results : PFS and OS



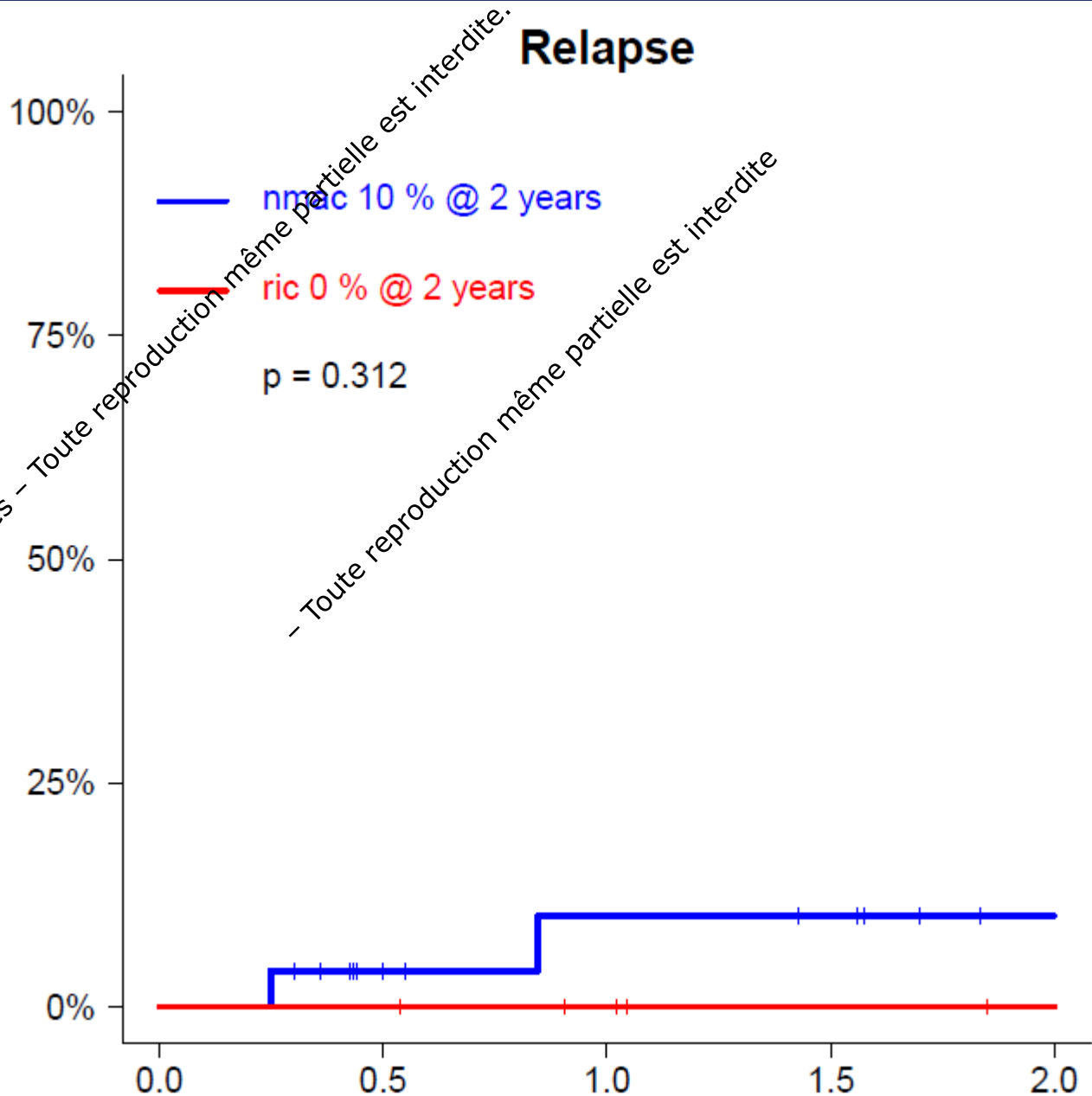
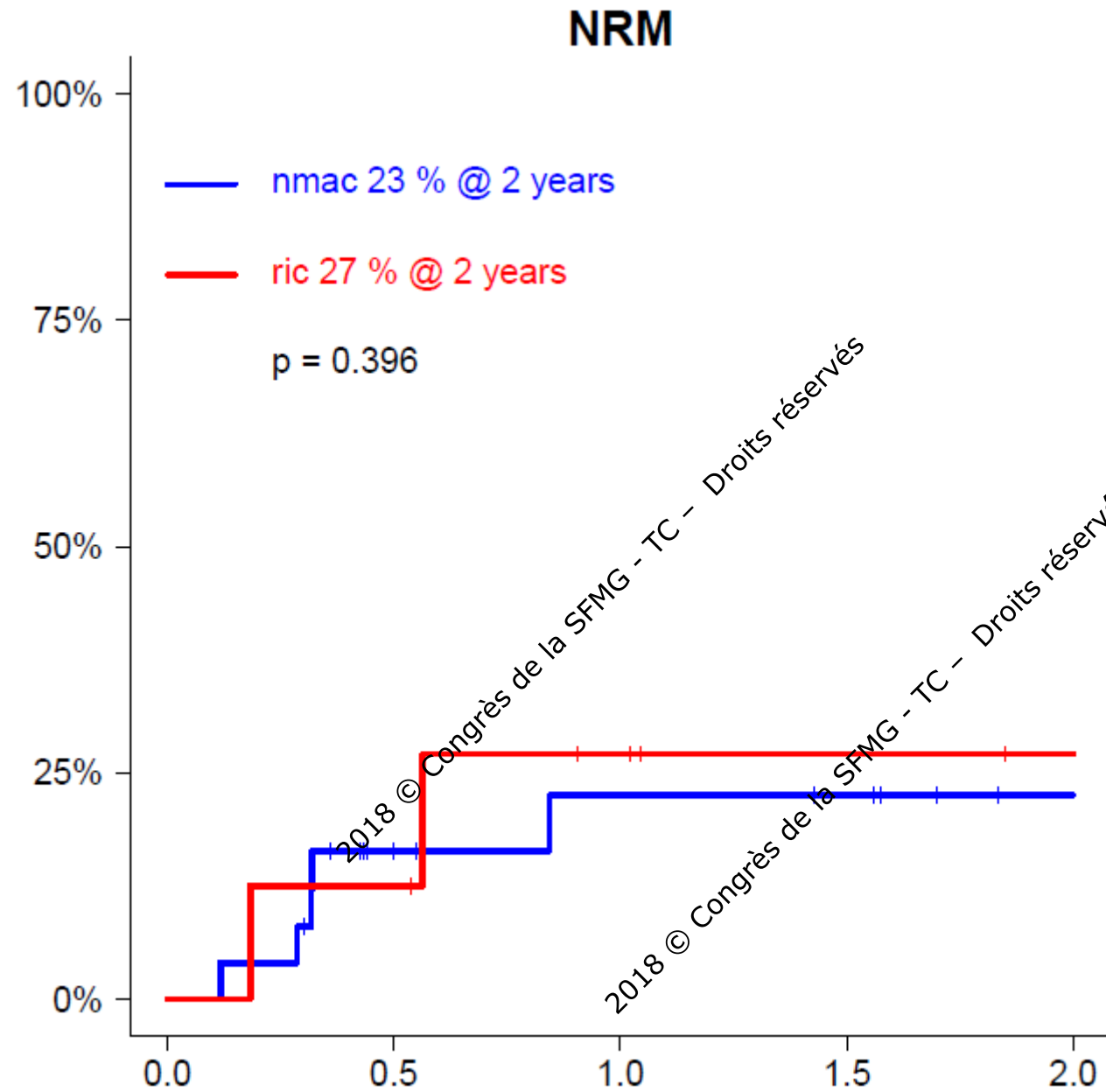
Results : GRFS



Results : Impact of HCT-CI



Results : Impact of conditioning regimen



Conclusions

- **Haplo-SCT is feasible for patients over 70 years**

- ✓ Low GVHD rate using PT-Cy
- ✓ No impact of HCT-CI

- **Perspectives**

- ✓ Comprehensive geriatric assessment-based strategy
- ✓ QOL assessment
- ✓ Prospective evaluation in homogeneous disease group

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C Lemarie
B Calmes

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B Mohty

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AC Lhoumeau
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T Aurrant
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V Maisano

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