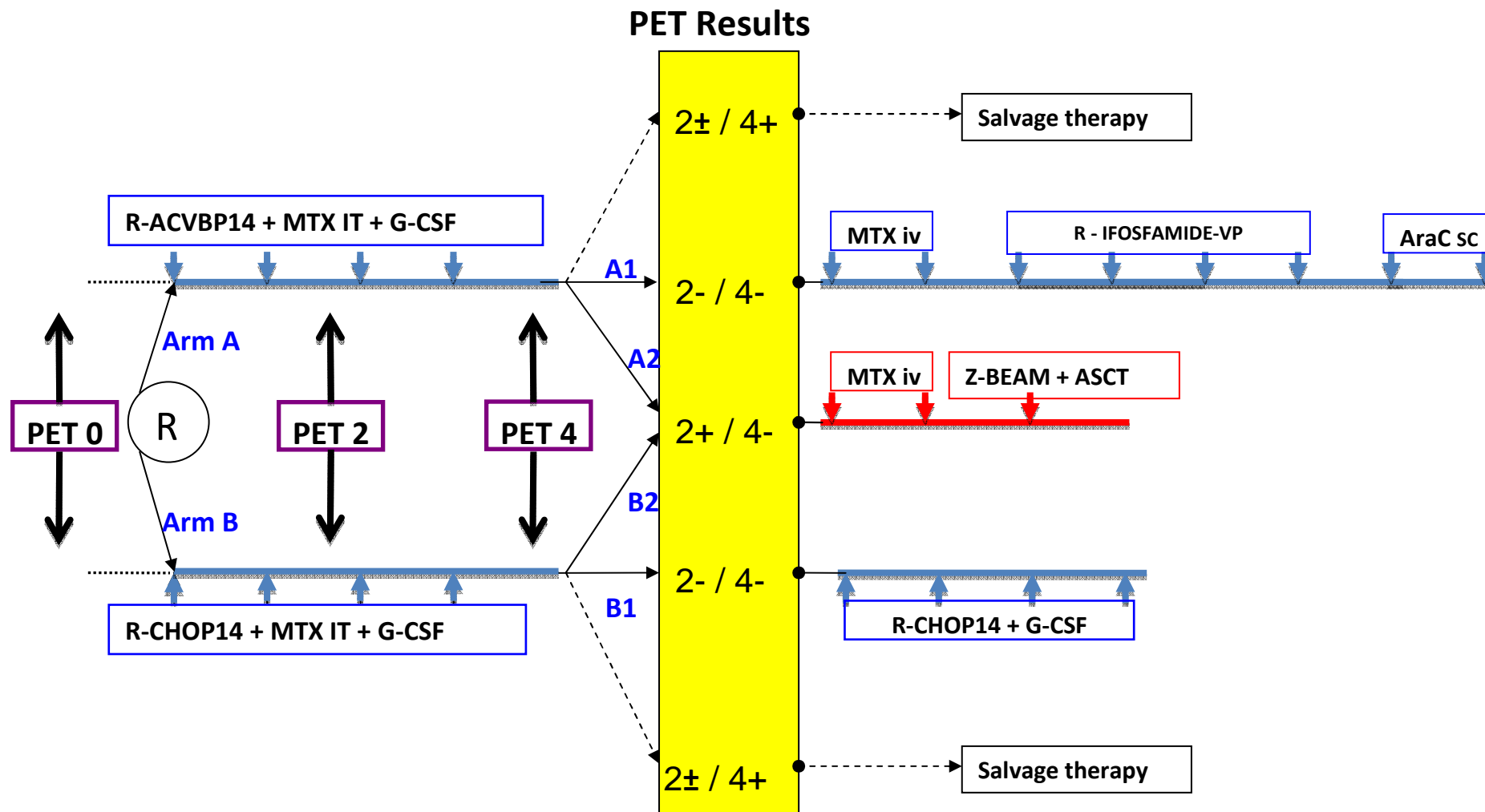


Interim [18]-FDG PET SUVmax reduction is superior to visual analysis based on Deauville criteria to predict early patient's outcome in DLBCL

R.O. Casasnovas*, M. Meignan, A. Berriolo-Riedinger, S. Bardet, A. Julian, C. Thieblemont, P. Vera, S. Bologna, J. Brière, J.P. Jais, C. Haioun, B. Coiffier and F. Morschhauser
on behalf of the Groupe d'étude des lymphomes de l'adulte (GELA)

*Department of Hematology, Hopital Le Bocage, Dijon, France

DLBCL: 18-60 y, aaIPI=2-3



PET review

- Planned real time central PET review (3 experts):

PET Interpretation according to **IHP criteria**

(M.Juweid et al, J.Clin.Oncol 2007; 25: 571)

- First exploratory PET analysis using quantitative criteria (ΔSUVmax): $\Delta\text{SUVmax} > \text{IHP}$ (PFS, OS)

(RO Casasnovas et al; Blood 2011; 118: 37)

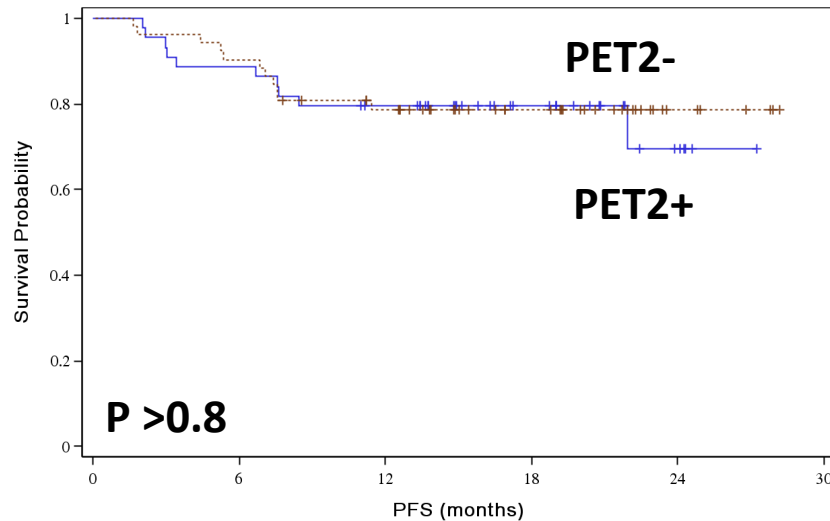
- Second exploratory PET analysis using visual DEAUVILLE criteria (5PS: <4 vs ≥ 4)



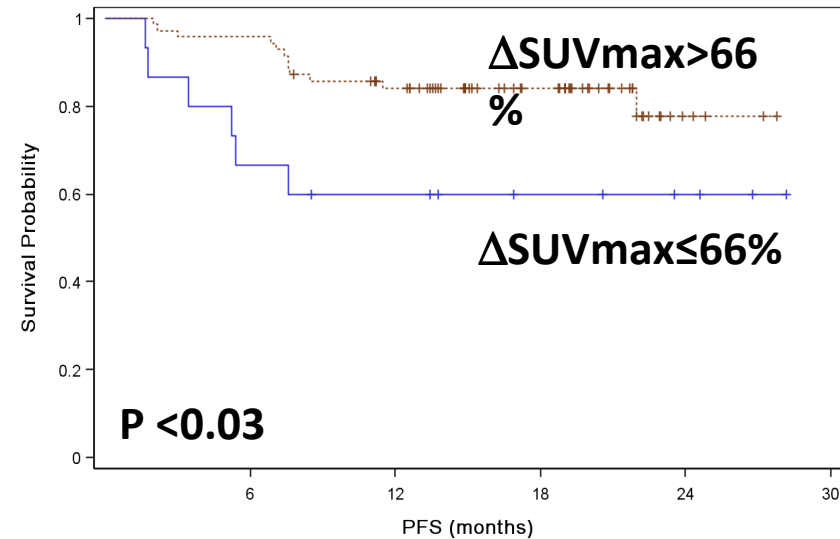
Comparison of 5PS visual criteria and quantitative PET results

PFS according to PET2 results


Visual Analysis (5PS: <4 vs ≥4)



ΔSUVmax PET0-2

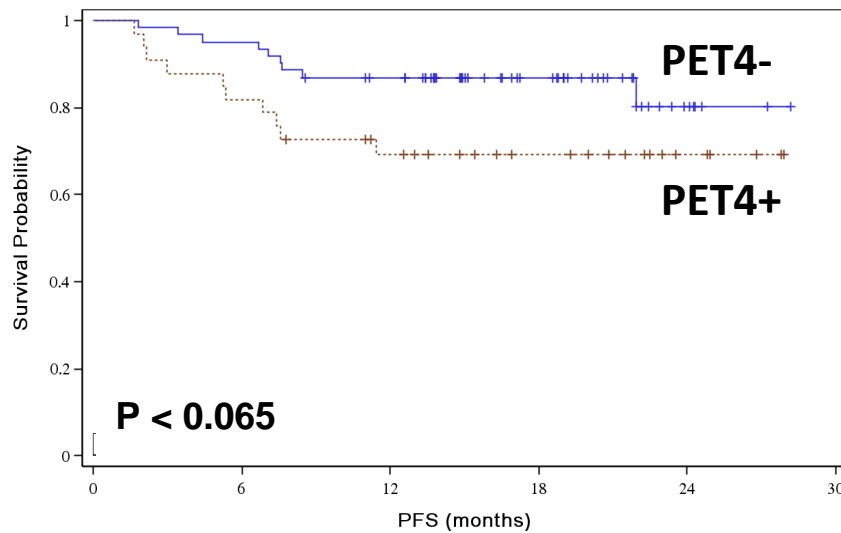


36/48 (75%) PET2+ pts reach a ΔSUVmax >66%

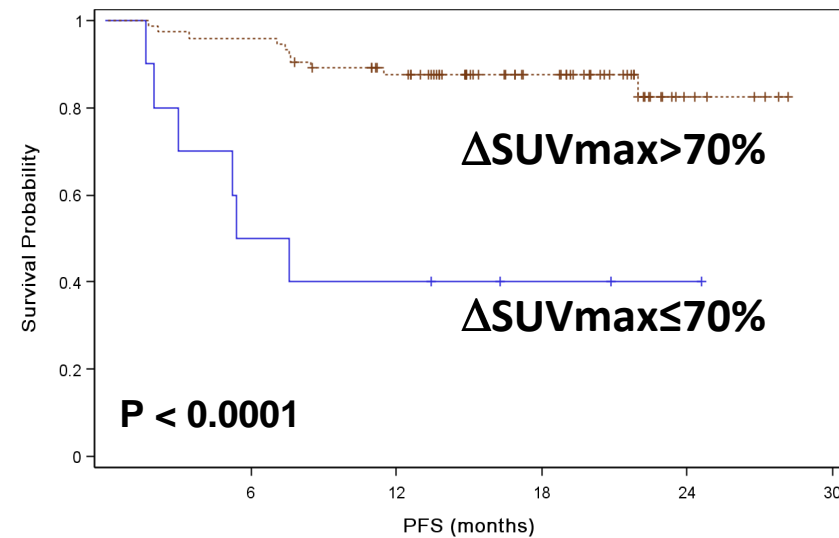
PET2+  **ΔSUVmax > 66% => 2yPFS = 86%**
ΔSUVmax ≤ 66% => 2yPFS = 58%

PFS according to PET4 results

Visual Analysis (5PS: <4 vs ≥4)



Δ SUVmax PET0-4

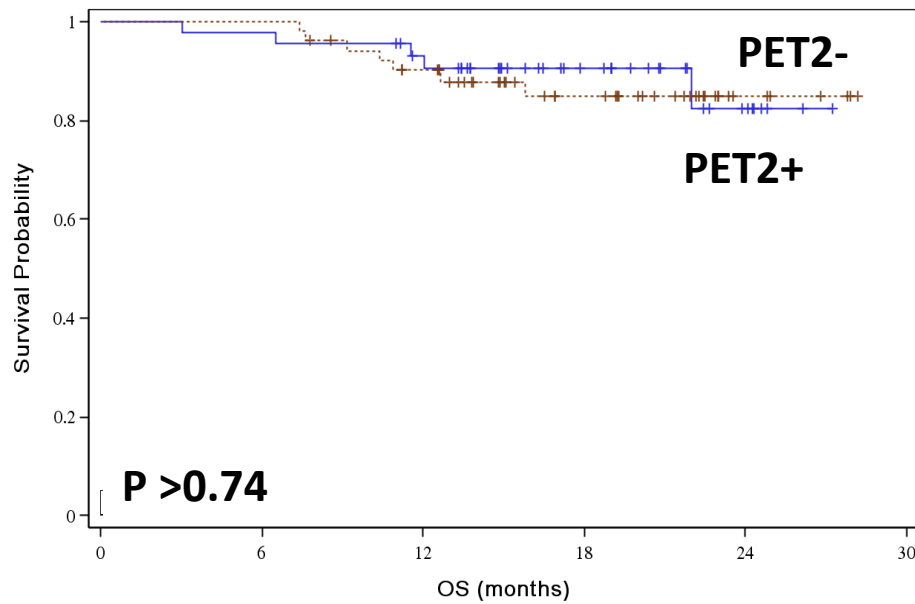


22/30 (73%) PET4+ pts reach a Δ SUVmax >70%

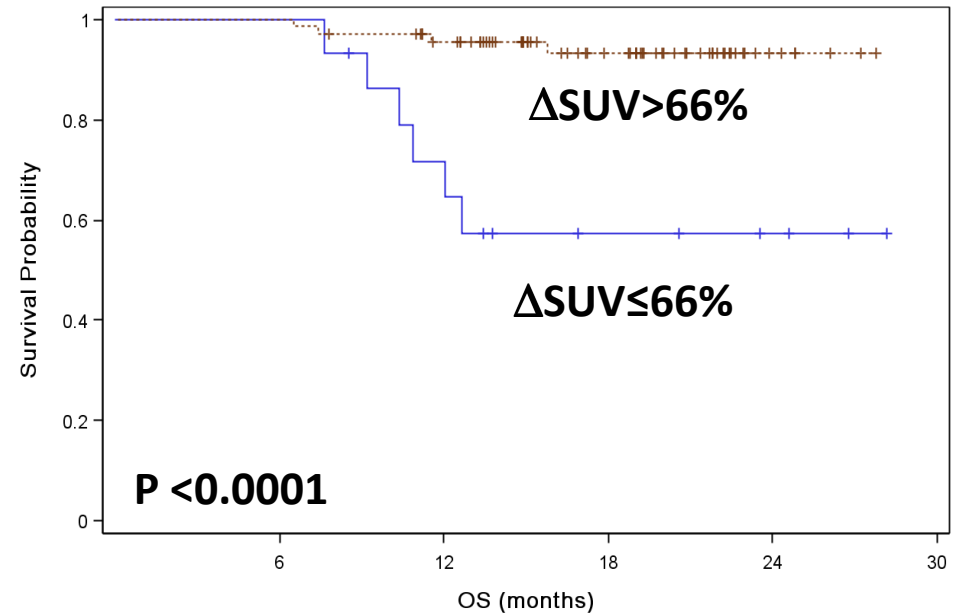
PET4+ $\begin{cases} \Delta$ SUVmax >70% \Rightarrow 2yPFS = 89% \\ Δ SUVmax ≤70% \Rightarrow 2yPFS = 0% \end{cases}

OS according to PET2 results

Visual Analysis (5PS: <4 vs ≥4)

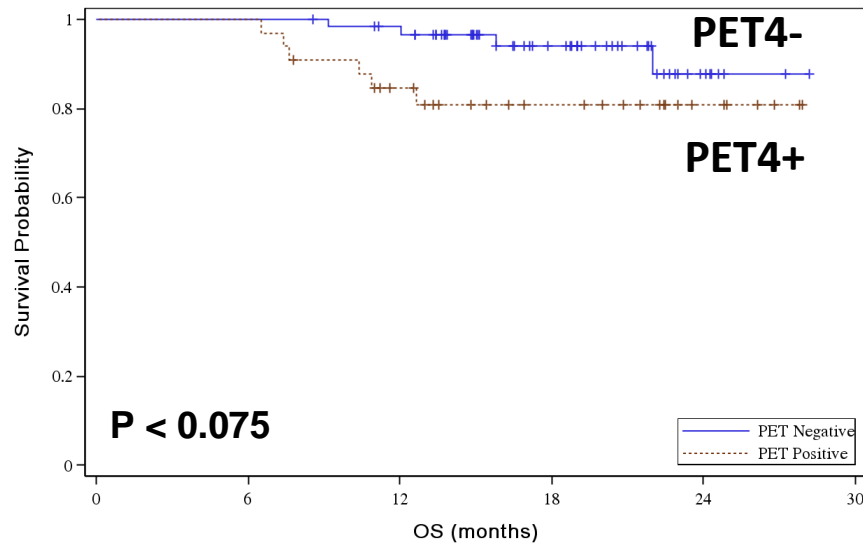


Δ SUVmax PET0-2

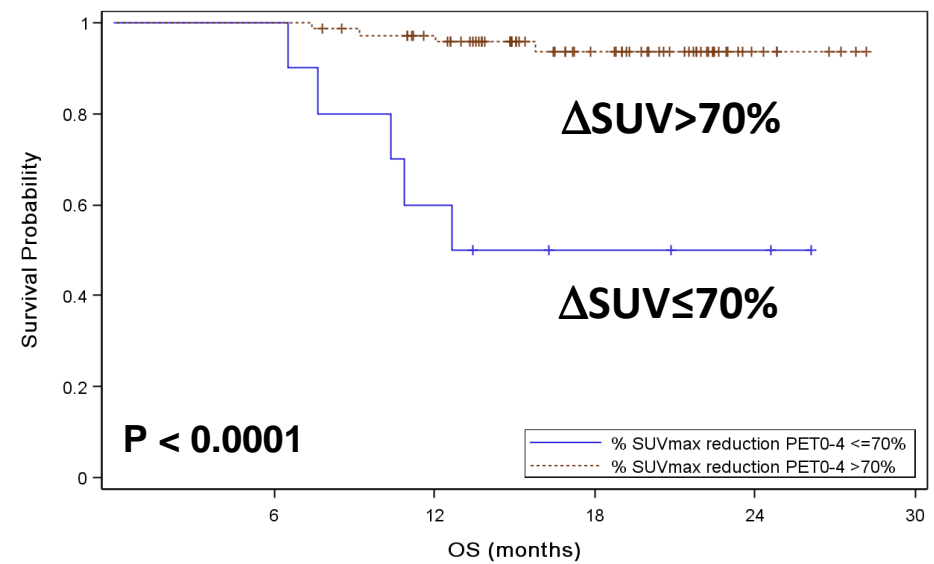


OS according to PET4 results

Visual Analysis (5PS: <4 vs ≥4)



ΔSUVmax PET0-4



Conclusion

Δ SUVmax analysis of interim PET better predicts patient's outcome than visual analysis based on 5PS criteria

PFS according to visual (5PS) and quantitative PET4 results

