

**PET based response evaluation  
according to Lugano classification:  
Where are we in daily practice?**

**Hodgkin Lymphoma**

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- Are the Deauville criteria used?
- What about Deauville score 3 - reproducibility
- Discrimination score 1 and 2
- Discrimination score 4 and 5
- End-of-treatment PET if interim PET negative?
- Impact of a positive End-of-treatment PET?

# Are the Deauville criteria used?

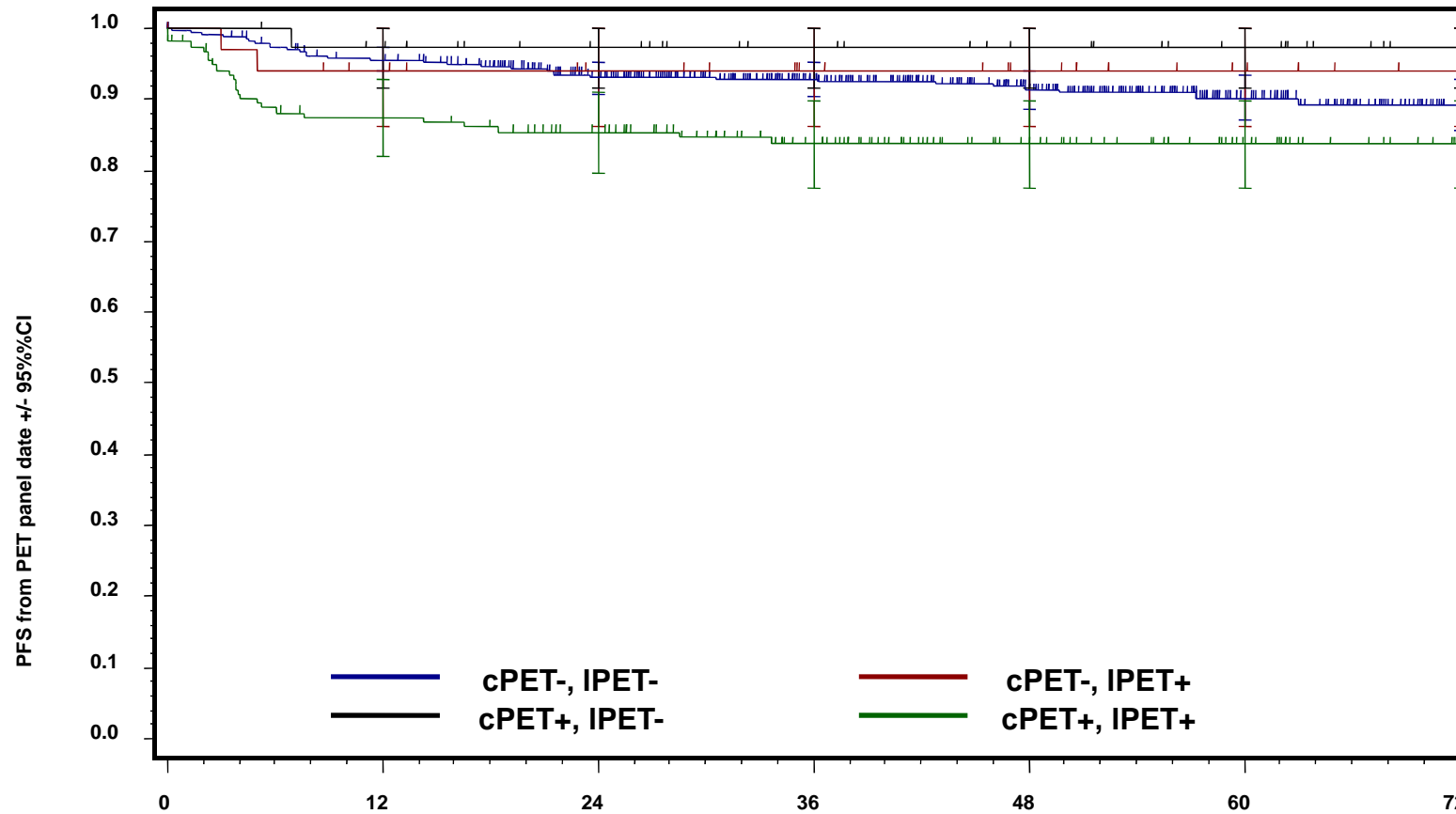


## *Scoring among five readers*

*Probability of concordance*

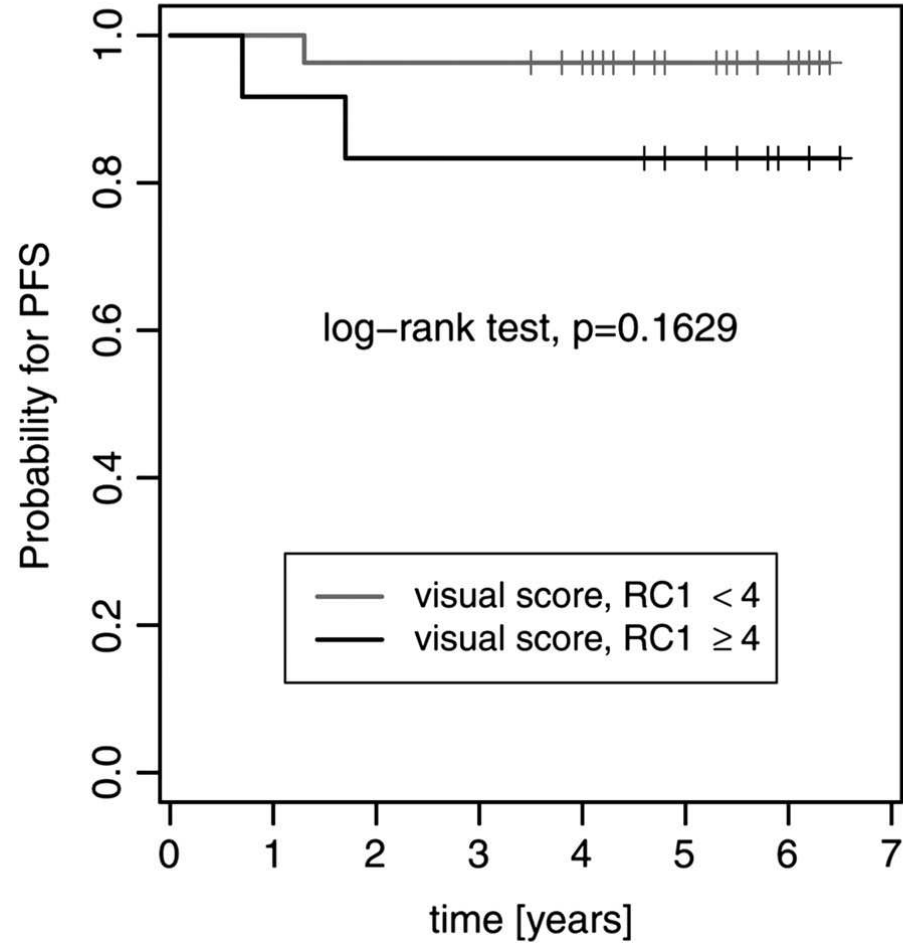
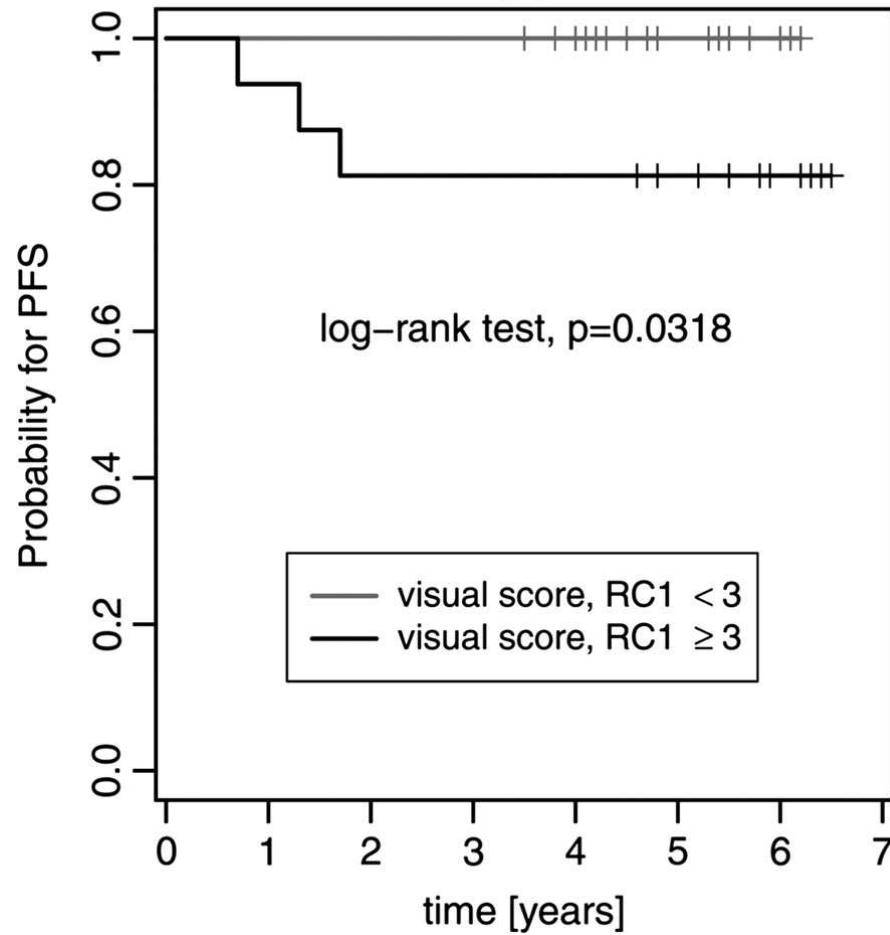
<b><i>Five categories: D1 vs D2 vs D3 vs D4 vs D5</i></b>	<i>0.422</i>
<b><i>Three categories: D1,2 vs D3 vs D4,5</i></b>	<i>0.604</i>
<b><i>Two categories: D1,2 vs D3,4,5</i></b>	<i>0.674</i>
<b><i>Two categories: D1,2,3 vs D4,5</i></b>	<i>0.864</i>

# Deauville score 3 - reproducibility



Pts. at Risk	Time [months]						
	0	12	24	36	48	60	72
cPET-,IPET-	513	475	411	309	215	109	42
cPET-,IPET+	35	30	26	21	16	9	4
cPET+,IPET-	36	33	26	20	15	10	2
cPET+,IPET+	155	129	116	84	51	28	9

# Discrimination score 1 and 2



# Discrimination score 1 and 2

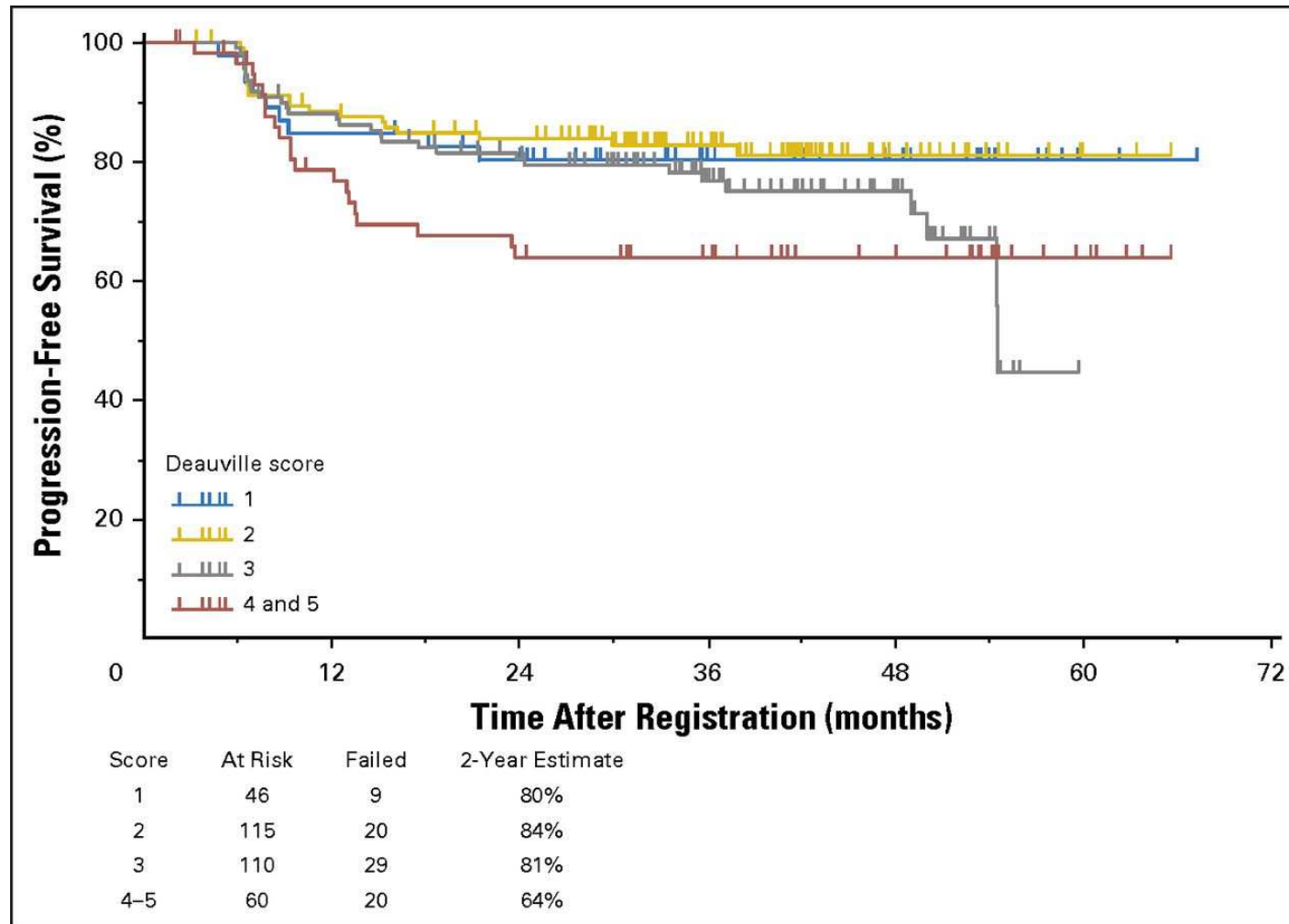
Criteria	Sensitivity (%)	Specificity (%)	Positive predictive value (%)	Negative predictive value (%)	Accuracy (%)
DC3 <sup>a</sup>	97	76	64	98	84
DC4 <sup>b</sup>	92	87	74	92	86

<sup>a</sup>Deauville Criteria considering scores 3–5 as positive

<sup>b</sup>Deauville Criteria considering scores 4 and 5 as positive

# Discrimination score 4 and 5

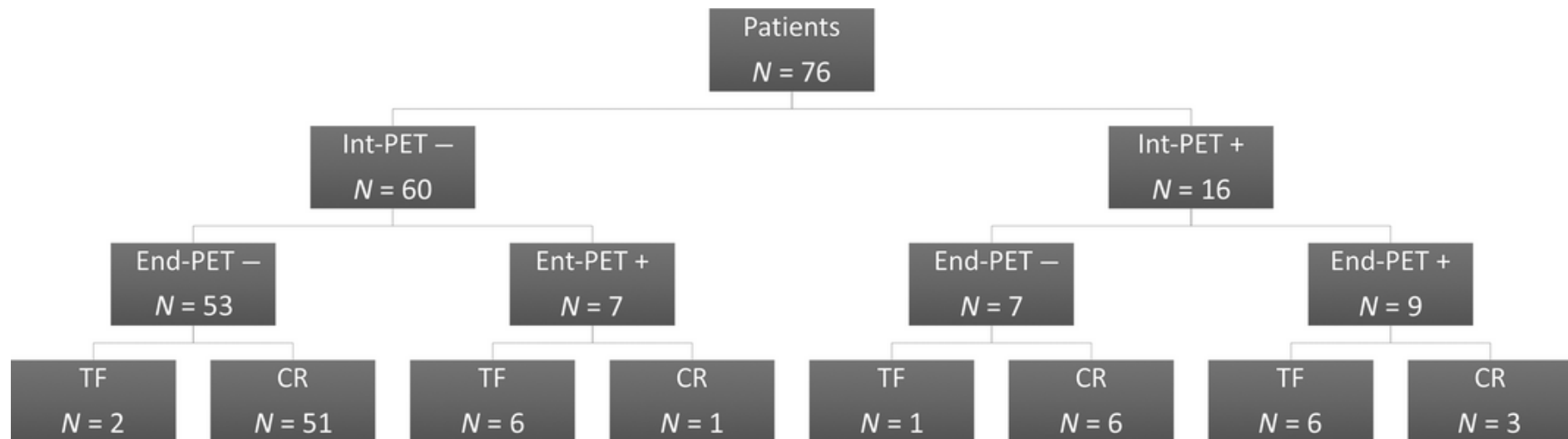
Progression-free survival of 331 evaluable patients with Hodgkin lymphoma treated with response-adapted therapy on the Southwest Oncology Group S0816 trial



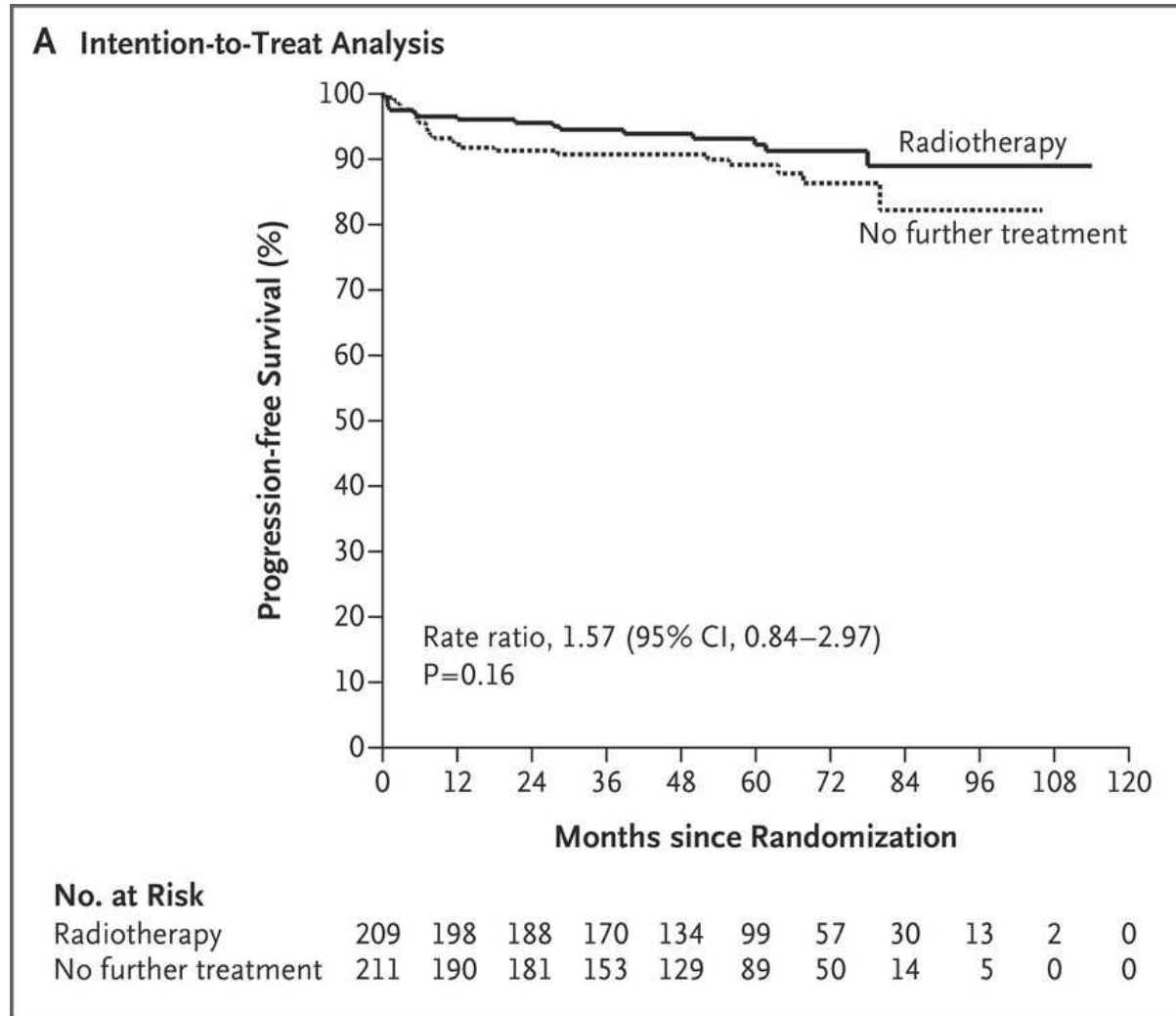


# End-of-treatment PET if interim PET negative?

Hodgkin lymphoma: a negative interim-PET cannot circumvent the need for end-of-treatment-PET evaluation



# Impact of a positive End-of-treatment PET?



German Hodgkin Study Group  
Deutsche Hodgkin Studiengruppe

**GHSg**   
[www.ghsg.org](http://www.ghsg.org)

**Thank you for your attention!**