

Outcomes of platinum-sensitive Small Cell Lung Cancer (SCLC) patients treated with platinum-based chemotherapy rechallenge: a multi-institutional retrospective analysis.

***G Genestreti¹, G Metro², H Kenmotsu³, F Carloni¹,
M A Burgio⁴, C Casanova⁵, M Tiseo⁶,
E Scarpi⁴, T Korkmaz⁷, R Califano⁸***

¹Department of Medical Oncology, “Cervesi” Hospital, Cattolica, Italy; ²Department of Medical Oncology, University Hospital, Perugia, Italy; ³ Division of Thoracic Oncology, Shizouka Cancer Center Shizouka, Japan; ⁴IRCCS Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori, Meldola, Italy; ⁵Department of Medical Oncology, “Santa Maria delle Croci” Hospital, Ravenna, Italy; ⁶Department of Medical Oncology, “Maggiore” Hospital, University of Parma, Italy; ⁷Dr. Luffi Kirdar Research and Training Hospital, Istanbul, Turkey; ⁸Department of Medical Oncology, The Christie NHS Foundation Trust, Manchester, UK



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No relevant conflict of interest to declare



Background

Aggressive disease, excellent response to first-line but short-lived

2nd-line chemotherapy may produce tumour regression but the evidence for a clinical benefit is limited

Platinum-based rechallenge is commonly used for platinum-sensitive ($\text{TTP} \geq 90\text{d}$) disease



Methods

Retrospective series, 7 International Institutions

112 platinum-sensitive pts treated with platinum-etoposide rechallenge (Jan 2007 – Dec 2011)

Endpoints:

- Response rate

- Progression-free survival

- Overall survival from rechallenge

- Overall survival from diagnosis



Patients Characteristics

	No	(%)
Patients	112	100
Gender		
Male	73	65
Female	39	35
Median age (range) 64 (40-83)		
Stage at diagnosis		
Limited disease	49	44
Extensive disease	63	56
Performance status		
0-1	97	87
2	15	13



First-line and Rechallenge

	No	(%)
First-line regimen		
Cisplatin/Etoposide	61	46
Carboplatin/Etoposide	51	54
No of cycles (range) 5 (1-6)		
Rechallenge regimen		
Cisplatin/Etoposide	16	14
Carboplatin/Etoposide	96	86
No of cycles (range) 3.6 (1-7)		



Further Line of Treatment

	No	(%)
Further chemotherapy		
Yes	40	36
No	72	64
Regimen		
Cyclophosphamide/Adryamycin/Vincristine (VAC)	10	25
Topotecan	10	25
Other	8	20
Carboplatin/Etoposide	6	15
Cyclophosphamide/Epirubicin/Vincristine (VEC)	3	7.5
Cisplatin/Etoposide	1	2.5
Carboplatin/Irinotecan	1	2.5
Gemcitabine/Paclitaxel	1	2.5

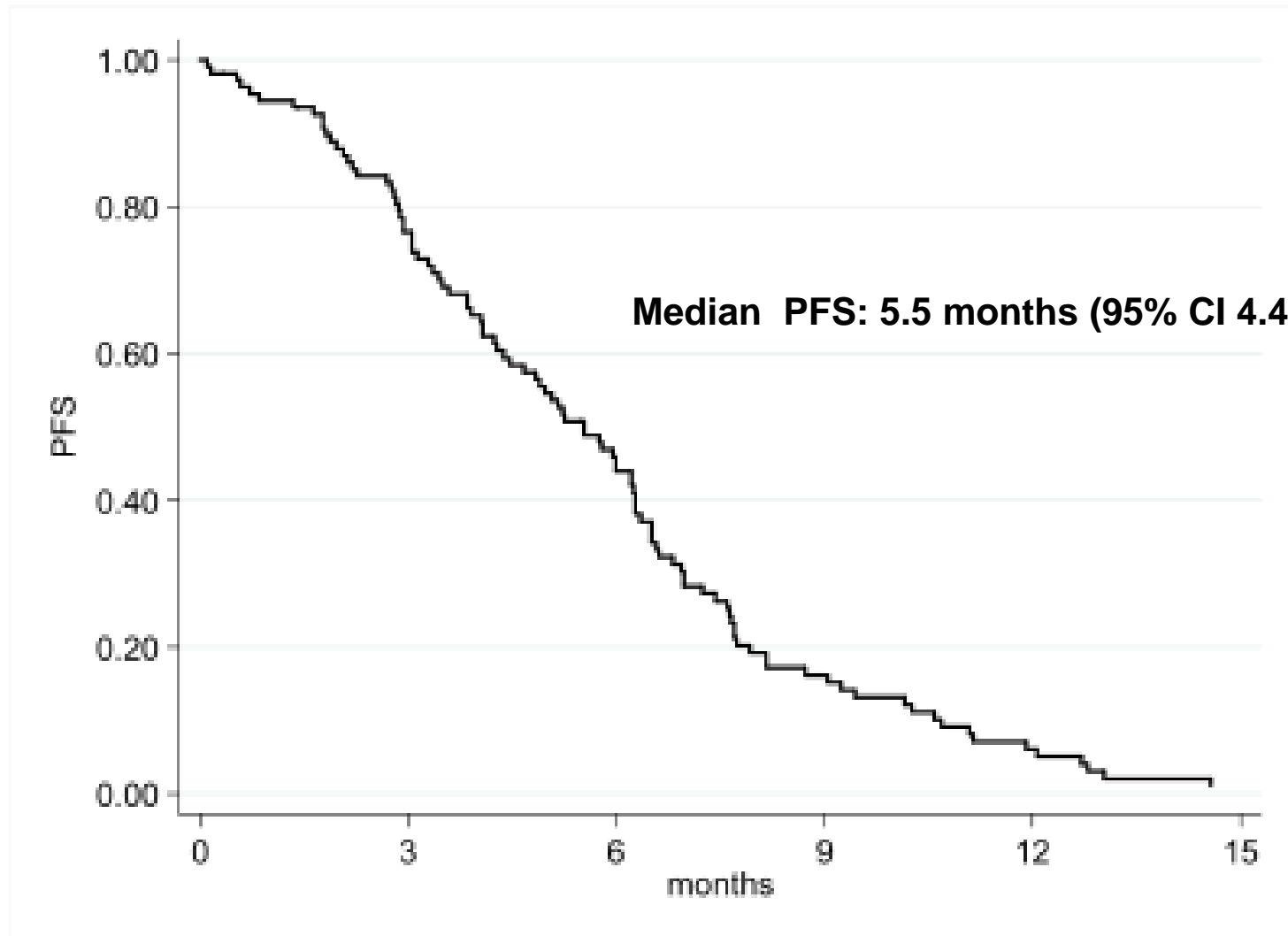


Response Rate

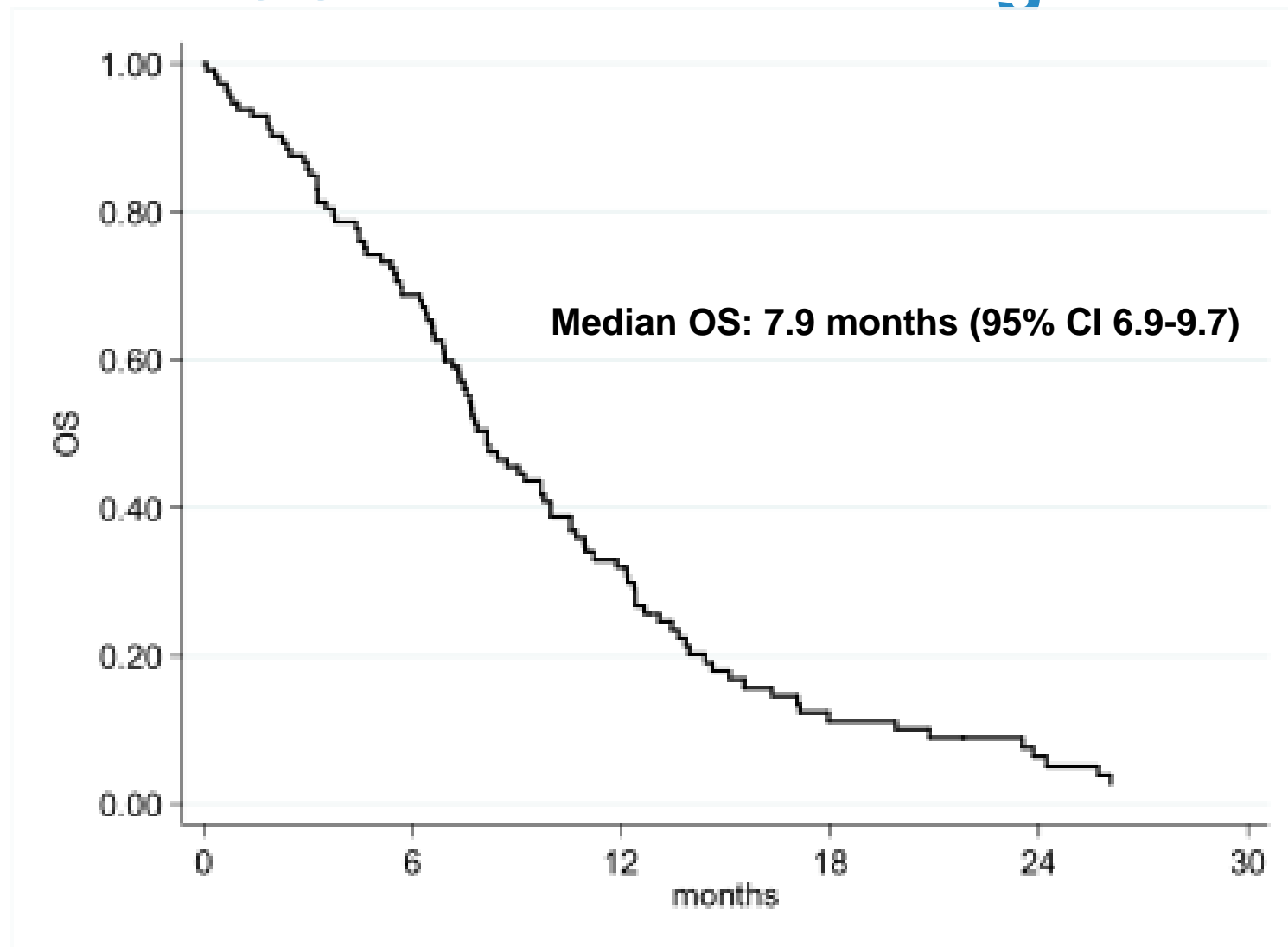
	No	(%)
Response to first-line chemotherapy		
Complete response	16	14
Partial response	94	84
Stable disease	2	2
Progressive disease	0	0
Response to rechallenge chemotherapy		
Complete response	4	3
Partial response	47	42
Stable disease	21	19
Progressive disease	30	27
Not evaluable	10	9



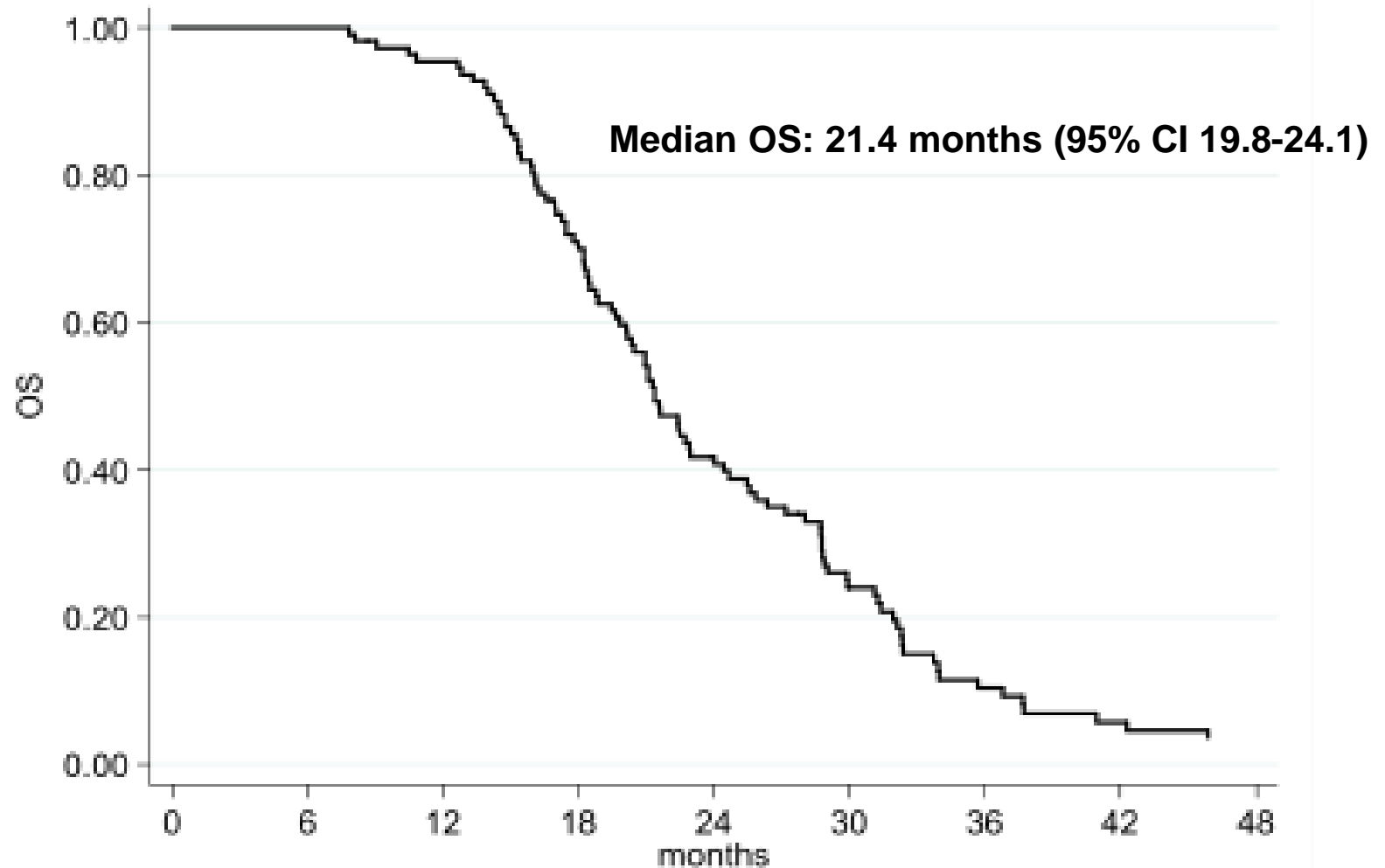
PFS From Rechallenge



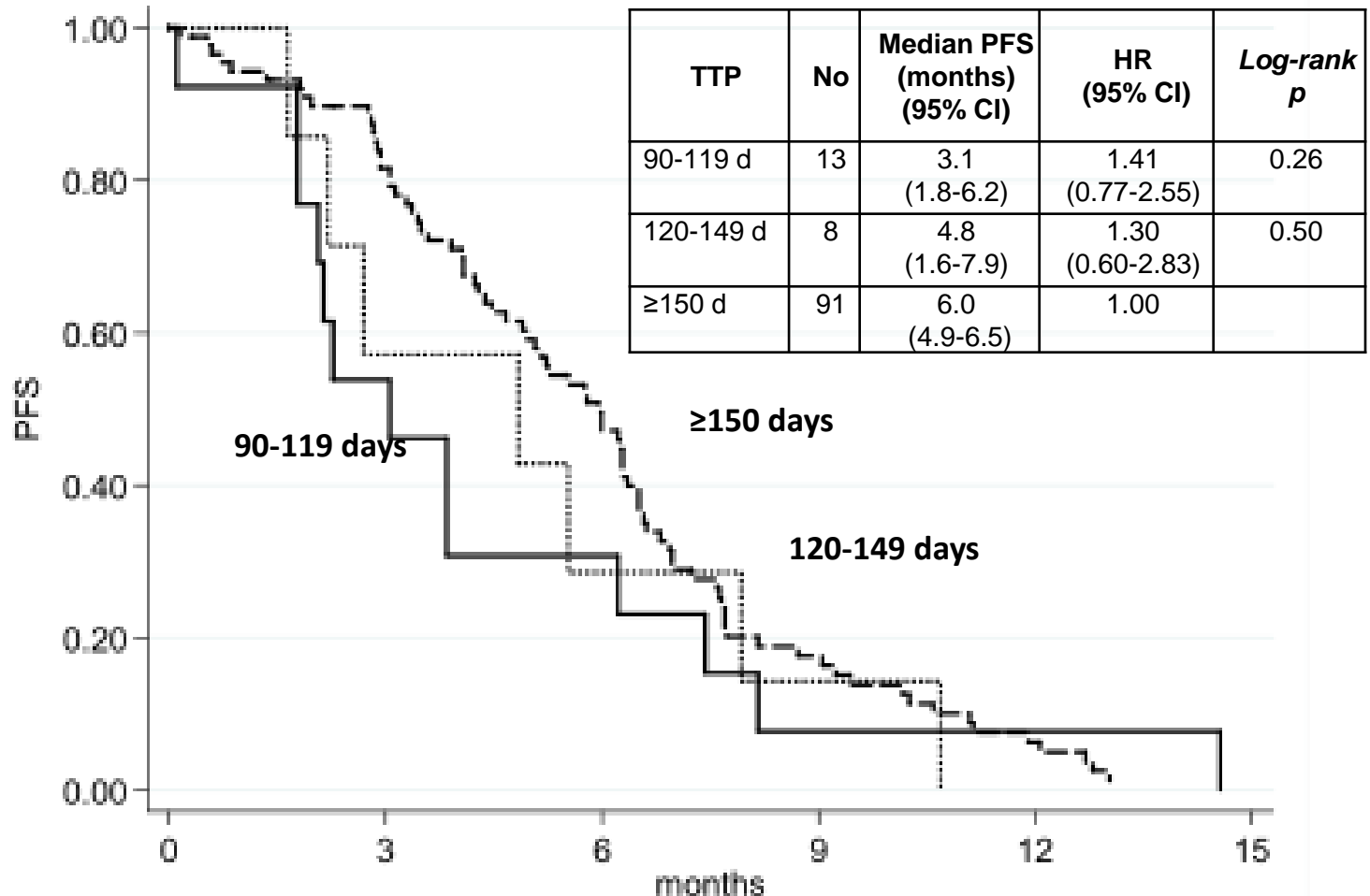
OS From Rechallenge



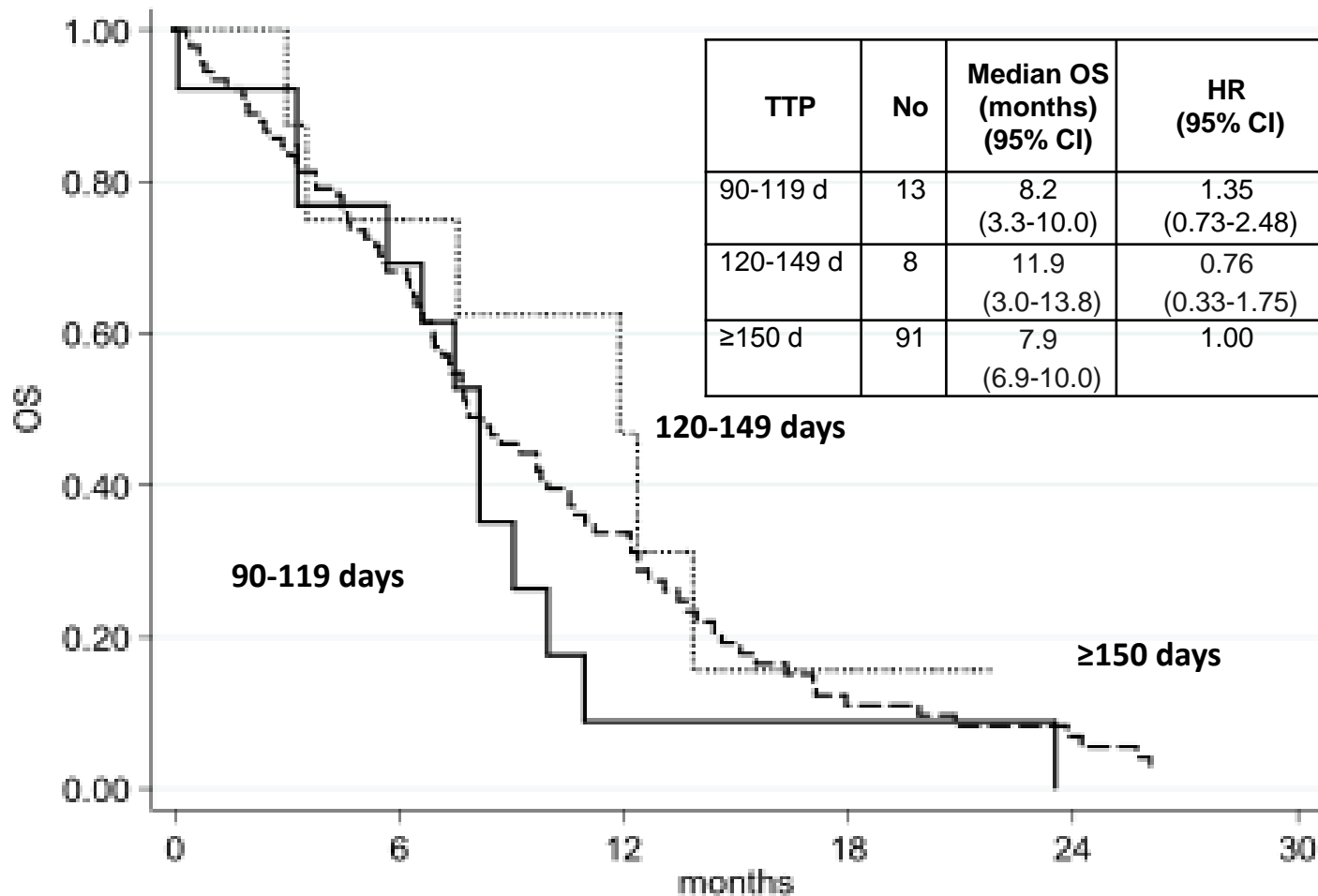
OS From Diagnosis



PFS from Rechallenge Subgroup Analysis



OS from Rechallenge Subgroup Analysis



Third-line treatment and Impact on PFS/OS

Further-line of treatment	No	PFS after third-line			OS after rechallenge		
		Events (No)	Median PFS (months) (95% CI)	<i>p</i> value	Events (No)	Median OS (months) (95% CI)	<i>p</i> value
Antracycline based regimen	13	13	4.9 (3.0-5.2)		11	5.4 (2.1-7.7)	
Platinum/etoposide	7	7	3.8 (1.0-5.5)		5	9.7 (0.7-15.1)	
Topotecan	10	10	2.6 (1.0-5.9)	0.901	9	5.2 (1.7-7.9)	0.454



Conclusions

Higher RR, Longer PFS and OS than reported in phase III studies with Topotecan and VAC

No difference in PFS or OS for longer TTP

Rechallenge is a reasonable 2nd-line option with potentially better outcomes

Randomised studies are needed to clarify optimal management in platinum-sensitive pts



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