

Supplementary Table 2: systemic treatments for each patient

Nº patient	1 <sup>st</sup> line	ORR	PFI (m)	2 <sup>nd</sup> line	ORR	PFI (m)	3 <sup>rd</sup> line	ORR	PFI (m)	4rd line
1	None									
2	CDDP-pem	PR	6	*Anetumab	PR	8				
3	CDDP-pem-Virus	PR	5	*Carbo-pem	SD	6	Nivo+ipi	SD	4m	
4	CDDP-pem	PR	10	*CDDP-pem	SD	4				
5	CDDP-pem-Virus	SD	12	*CDDP-pem	PR	5	antiPD1	PD		
6	None									
7	None									
8	CDDP-pem	SD	NR							
9	CDDP-pem-beva	PR	8	Carbo-pem	PD	0	Pembro	PR	6m	*LAG3
10	CDDP-pem	PD		Vinorelbine	PR	10	*Gemcitabine	PD		

(\*) means the time of second biopsy (performed before to initiate the therapy). Pem: pemetrexed; beva: bevacizumab; ORR: overall response rate, PR: partial response, SD: stable disease, PD: progressive disease, PFI: progression free interval, m: months, NR: not reached