

Article

Combination of immune checkpoint inhibitors and liver-specific therapies in liver-metastatic uveal melanoma: Can we thus overcome its high resistance?

Special issue: Advances in the Treatment of Metastatic Uveal Melanoma

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Table S1. Therapy of liver-metastatic Uveal Melanoma

Therapy of liver-metastatic UM	n (%)	Cumulated %		
Therapy completed				
No	3 (6.7)	6.7		
Yes	35 (77.8)	84.4		
Therapy during data collection	7 (15.6)	100.0		
Therapies performed				
Surgical resection of liver metastases	11 (26.2)			
Liver-directed therapy	23 (54.8)			
Systemic therapy	35 (83.3)			
Liver-directed therapy				
TACE	20 (44.4)			
SIRT	2 (4.4)			
Chemosaturation	1 (2.2)			
Systemic therapy				
Dual ICI (Ipilimumab+Nivolumab)	20 (44.4)			
Anti-PD-1 (Nivolumab/Pembrolizumab)	4 (8.9)			
Chemotherapy (Gemcitabine/Decarbazine)	6 (13.3)			
Anti-CTLA-4 (Ipilimumab)	5 (11.1)			
Targeted Therapy (Trametinib)	3 (6.7)			

Therapy regimens	n (%) ¹	Cumulated %	Median OS (months)	n events ²
<i>Cohort 1</i>	19 (45.2)			
Dual ICI + Surgical resection	4 (9.5)	52.4	55.65	1
Anti-PD-1 + Surgical resection	1 (2.4)	54.8	4.2	1
Dual ICI + TACE	8 (19.0)	76.2	10.23	6
Dual ICI + Chemosaturation	1 (2.4)	78.6	32.4	0
Anti-PD-1 + SIRT	1 (2.4)	81.0	22.5	1
Anti-CTLA-4 + TACE	2 (4.8)	85.8	18.68	2
Dual ICI + TACE + Surgical resection	1 (2.4)	93.0	25.93	1
Anti-PD-1 + SIRT + Surgical resection	1 (2.4)	95.4	44.13	0
<i>Cohort 2</i>	23 (54.8)			
Surgical resection alone	1 (2.4)	2.4	42	0
Liver-directed therapy (TACE) alone	5 (11.9)	14.3	7.17	5
Dual ICI alone	6 (14.3)	28.6	4.25	4
Anti-PD-1 alone	1 (2.4)	31.0	5.63	1
Chemotherapy + Anti-CTLA-4	3 (7.1)	38.1	15.63	3
Targeted therapy alone	1 (2.4)	40.4	11.37	1
IMCgp-100 alone	1 (2.2)	42.9	4.77	0
Chemotherapy + Surgical resection	1 (2.4)	57.2	10.7	1
Chemotherapy + TACE	2 (4.8)	90.6	25.13	1
Targeted therapy + TACE + Surgical resection	1 (2.4)	97.7	28.87	1
TACE + Surgical resection	1 (2.4)	100.0	3.67	0

Note. ¹Percentages refer to n=patients who underwent treatment. ²events are defined as death, all other patients were censored.

Table S2. Laboratory values at Baseline

Laboratory: Baseline ¹	No. (%) ²	Median	Interquartile difference	Elevated, no. (% ⁴)
LDH (120-246 U/l)	35 (77.8)	293	214	24 (68.6)
S100 (-0.15 µg/l)	27 (60.0)	.06	.13	7 (25.9)
Eosinophile Granulocytes (0.1-0.5 Mrd/l)	32 (71.1)	.17	.23	4 (12.5)
NLR ³ (-3.5)	32 (71.1)	3.12	2.2	14 (43.8)

Note. ¹"Baseline": Laboratory values prior to initial system therapy. If no systemic therapy was given, an alternative laboratory was chosen. ²Since not all laboratory values were available for every patient, "No. (%)" indicates how many laboratory values were included in the statistics. ³ Neutrophil-to-Lymphocyte-Ratio. ⁴ Elevated parameters in relation to the total number of parameters collected (= valid percentages).

Figure S1

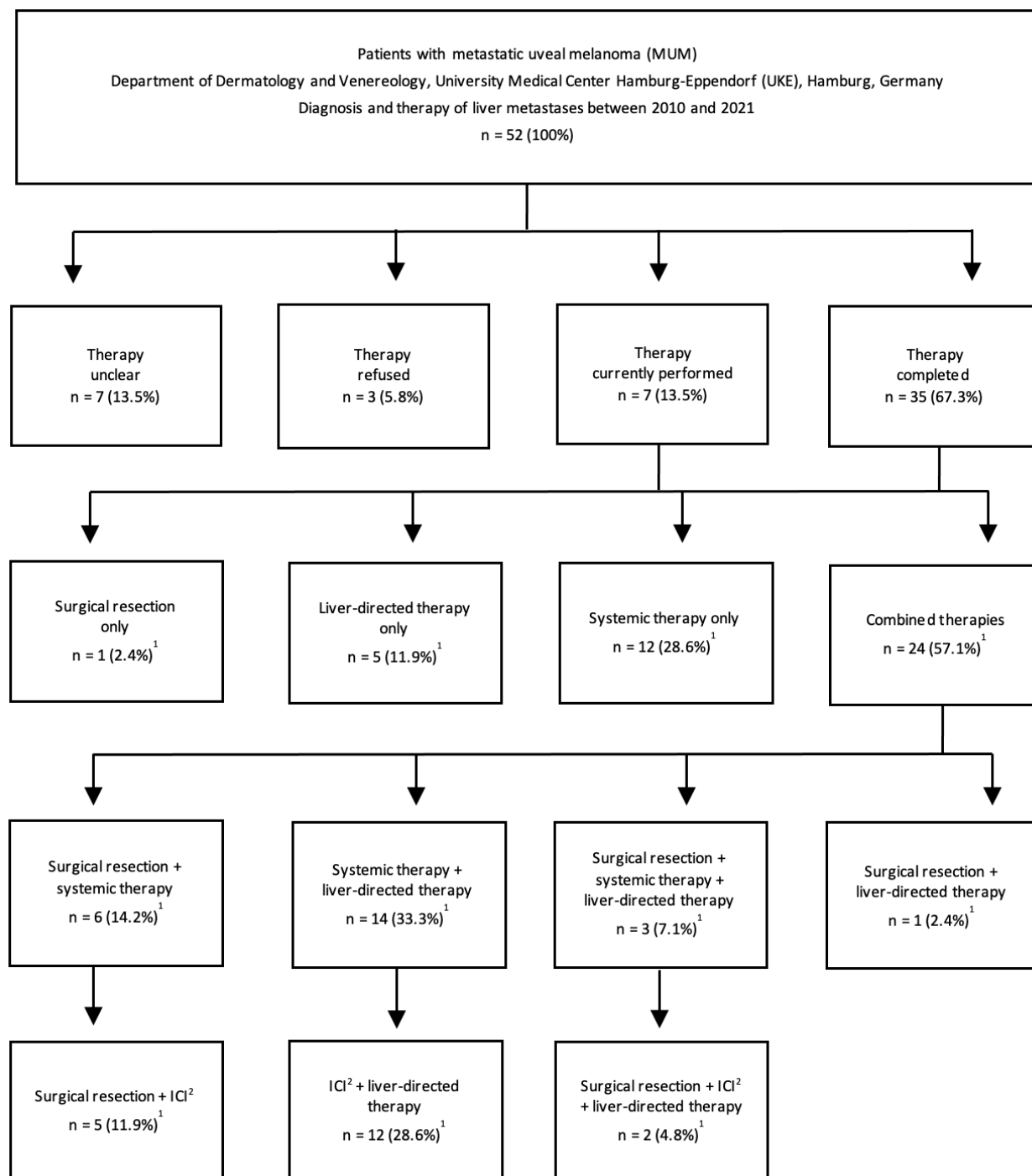


Figure S1 Flow chart on cohort composition. *Note.* ¹Percentages refer to a total of n=42 patients whose metastatic disease has been treated. ²“ICI” includes dual anti-PD-1 (Nivolumab) plus anti-CTLA-4 (Ipilimumab) as well as anti-PD-1 (Nivolumab or Pembrolizumab) or anti-CTLA-4 (Ipilimumab) alone.

Figure S2

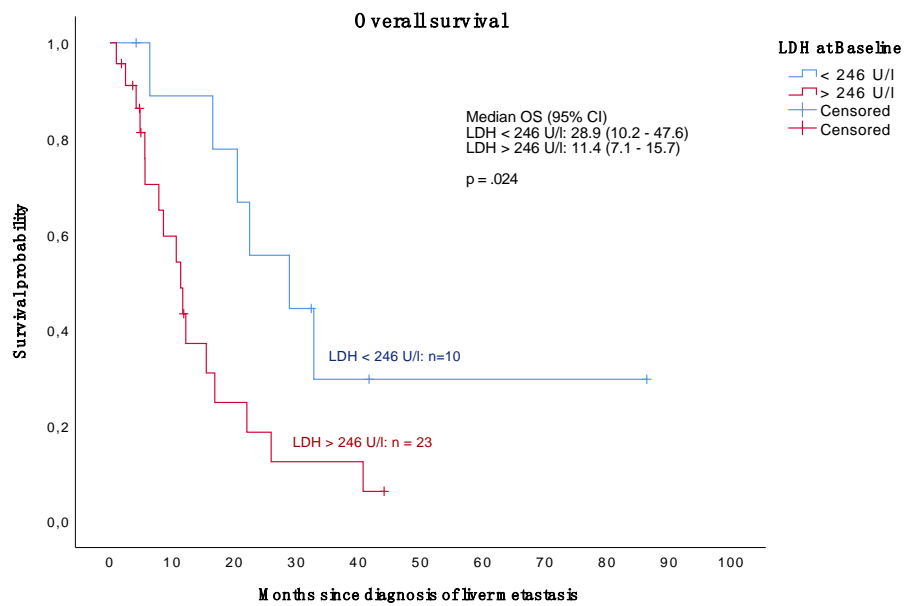


Figure S2 Effect of LDH at Baseline on overall survival of patients with liver-metastatic Uveal Melanoma (n=33; Cut-Off: 246 U/l).

Figure S3

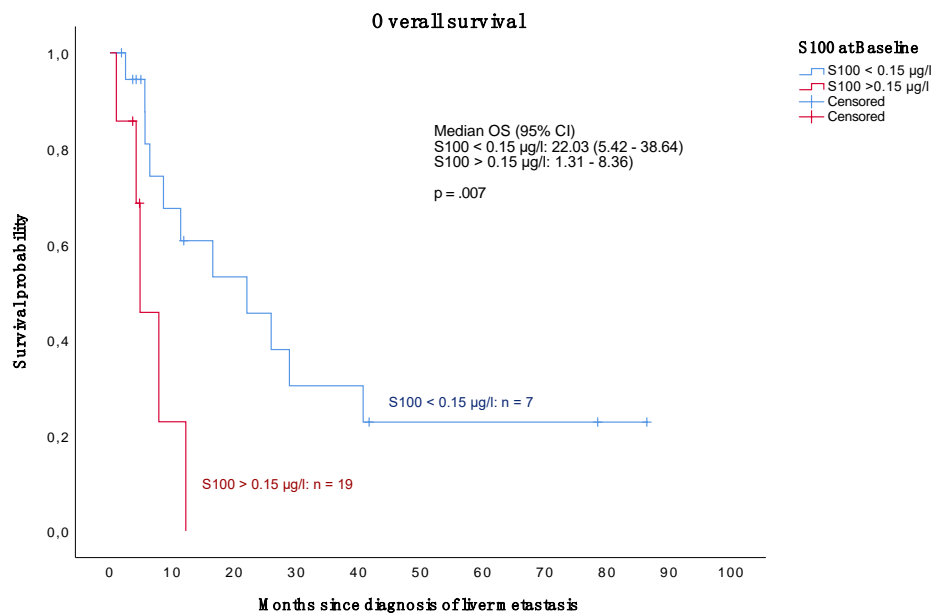


Figure S3 Effect of S100 at Baseline on overall survival of patients with liver-metastatic Uveal Melanoma (n=26; Cut-Off: 0.15 µg/l).

Figure S4.

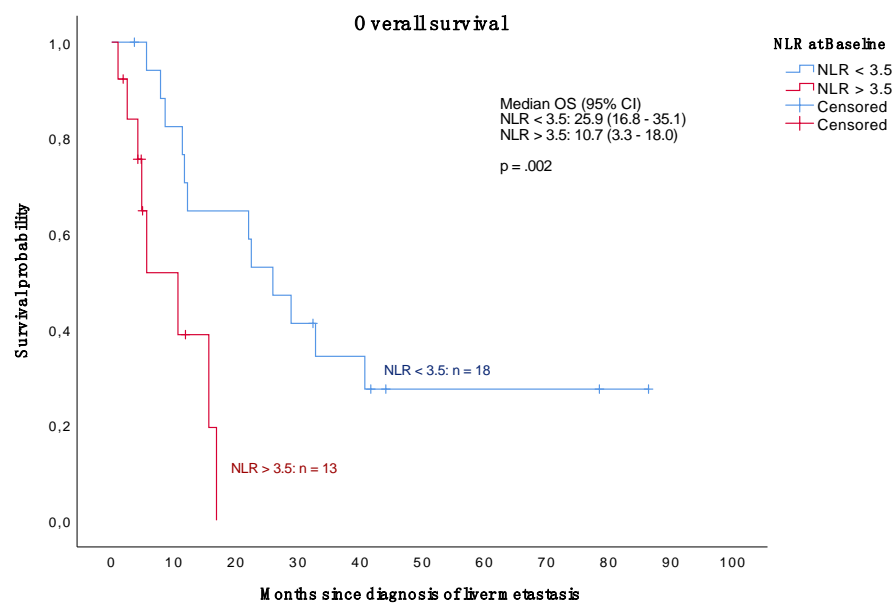


Figure S4 Effect of NLR (Neutrophil-to-Lymphocyte Ratio) at Baseline on overall survival of patients with liver-metastatic Uveal Melanoma (n=31; Cut-Off: 3.5).

Figure S5.

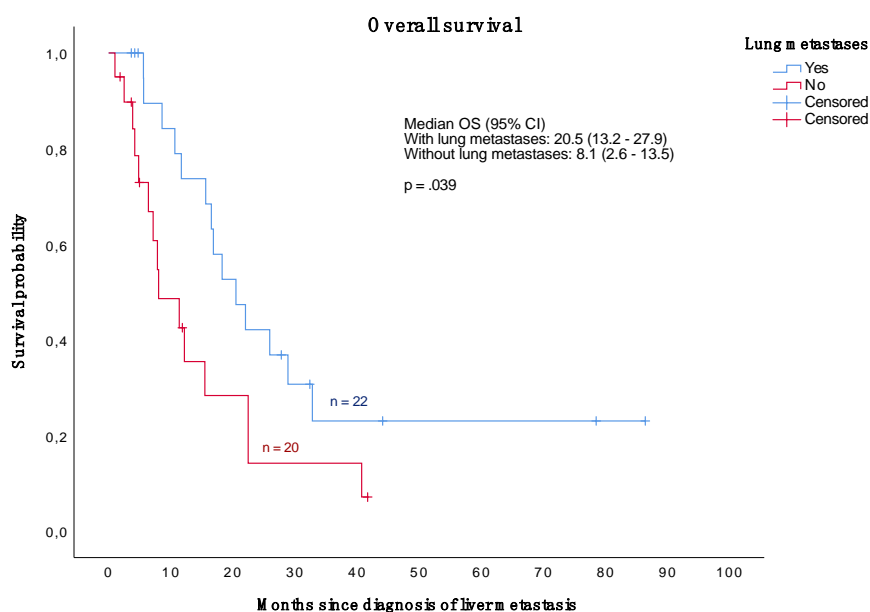


Figure S5 Effect of lung metastases on overall survival of patients with liver-metastatic Uveal Melanoma (n=42).