## **Supplementary Methods**

The RMH score(13), based on pretreatment number of metastatic sites, lactate dehydrogenase (LDH) and serum albumin, was validated in patients treated with cytotoxic and targeted therapies in phase I trials. The GRIm-Score(14) is validated in IO phase I trials and is based on albumin, LDH and neutrophil-to-lymphocyte ratio (NLR). LIPI score(15) is based on pretreatment derived neutrophils/(leukocytes minus neutrophils) ratio (dNLR) and lactate dehydrogenase (LDH). The LIPI is a prognostic score in NSCLC patients treated for immune checkpoint inhibitors.

RMH score	GRIm score	LIPI score
Number of metastatic sites >2 (+1)	NLR (neutrophils-to-	dNLR (neutrophils/(leukocytes
	lymphocytes) > 6 (+1)	minus neutrophils)) > 3 (+1)
LDH > UNL (+1)	LDH > UNL (+1)	LDH > UNL (+1)
Albumin < 35 g.l <sup>-1</sup> (+1)	Albumin < 35 g.l <sup>-1</sup> (+1)	
$\rightarrow$ low risk (0 - 1 factor)	→ low risk (0 - 1 factor)	→ low risk (0 factor)
→ high risk (2 - 3 factors)	→ high risk (2 - 3 factors)	$\rightarrow$ intermediate risk (1 factor)
		→ high risk (2 factors)

UNL: upper limit normal.