



**Supplementary Figure 1.** Swimmers plot showing the PFS of immunotherapy and subsequent therapy. Each bar represents one patient. **A:** Patients treated with ICIs monotherapy beyond progression. **B:** Patients treated with ICIs combination therapy beyond progression. PFS: progression-free survival, PD: progressive disease.

**Supplementary Table 1.** Progression sites after ICIs failure

<b>Progression sites</b>	<b>Total n(%)</b>	<b>Oligoprogression n(%)</b>	<b>Systemic progression n(%)</b>	<b>p-value</b>
<b>Lung</b>	79 (66.9)	29 (63.0)	50 (69.4)	0.471
<b>Bone</b>	15 (12.7)	6 ((13.0)	9 (12.5)	0.931
<b>Lymph nodes</b>	13 (11.0)	3 (6.5)	10 (13.9)	0.213
<b>Brain</b>	12 (10.2)	6 (13.0)	6 (8.3)	0.409
<b>Pleura</b>	12 (10.2)	0(0)	12 (16.7)	0.003
<b>Liver</b>	7 (5.9)	2 (4.3)	5 (6.9)	0.560
<b>Adrenal</b>	4 (3.4)	2 (4.3)	2 (2.8)	0.646
<b>Soft tissue</b>	3 (2.5)	2 (4.3)	1 (1.4)	0.319
<b>Pericardium</b>	3 (2.5)	0(0)	3 (4.2)	0.161

ICIs: immune checkpoint inhibitors.