

## Supplementary Materials

**Table S1** Risk of bias

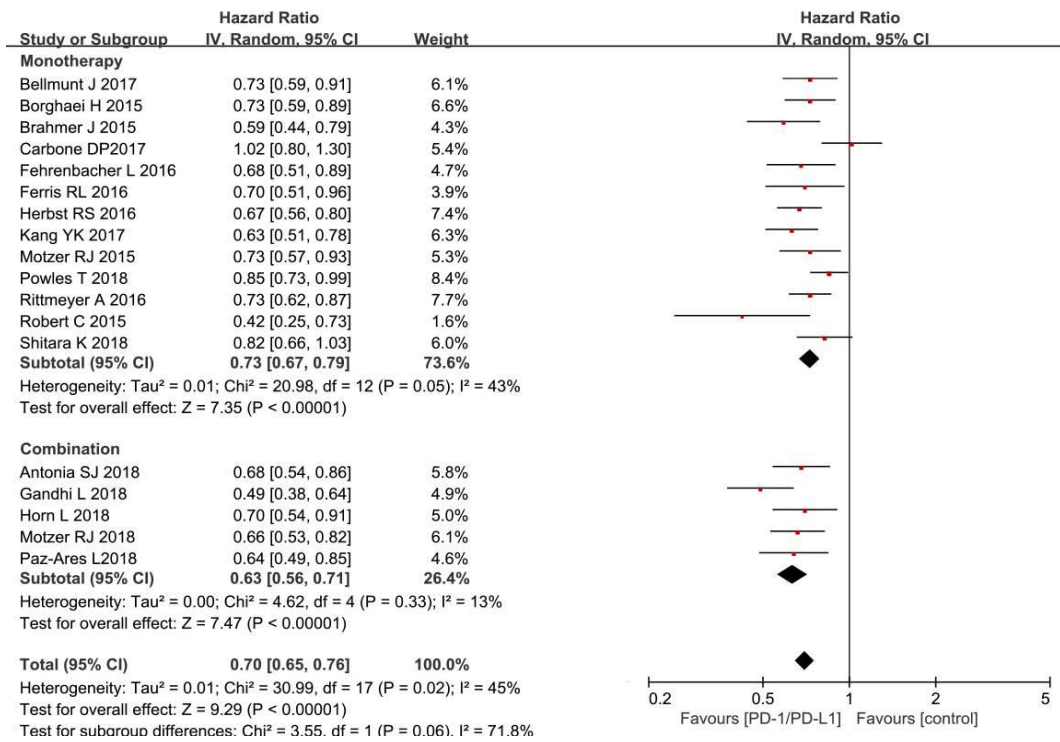
Study	Radom sequence generation	Allocation concealment	Blinding of participants and personel	Blinding of outcome assessment	Incompletement outcome data	Selective reporting	Other bias
Antonia SJ 2018	+	+	+	+	+	+	+
Bellmunt J 2017	+	+	-	-	+	+	+
Borghaei H 2015	+	+	-	-	+	+	+
Brahmer J 2015	+	+	?	?	+	+	+
Carbone DP 2017	+	+	-	-	+	+	+
Fehrenbacher L 2016	+	+	-	-	+	+	+
Ferris RL 2016	+	+	-	-	+	+	+
Gandhi L 2018	+	+	+	+	+	+	+
Herbst RS 2016	+	+	-	-	+	+	+
Horn L 2018	+	+	+	?	+	+	+
Kang YK 2017	+	+	+	+	+	+	+
Motzer RJ 2015	+	+	-	?	+	+	+
Motzer RJ 2018	+	+	-	+	+	+	+

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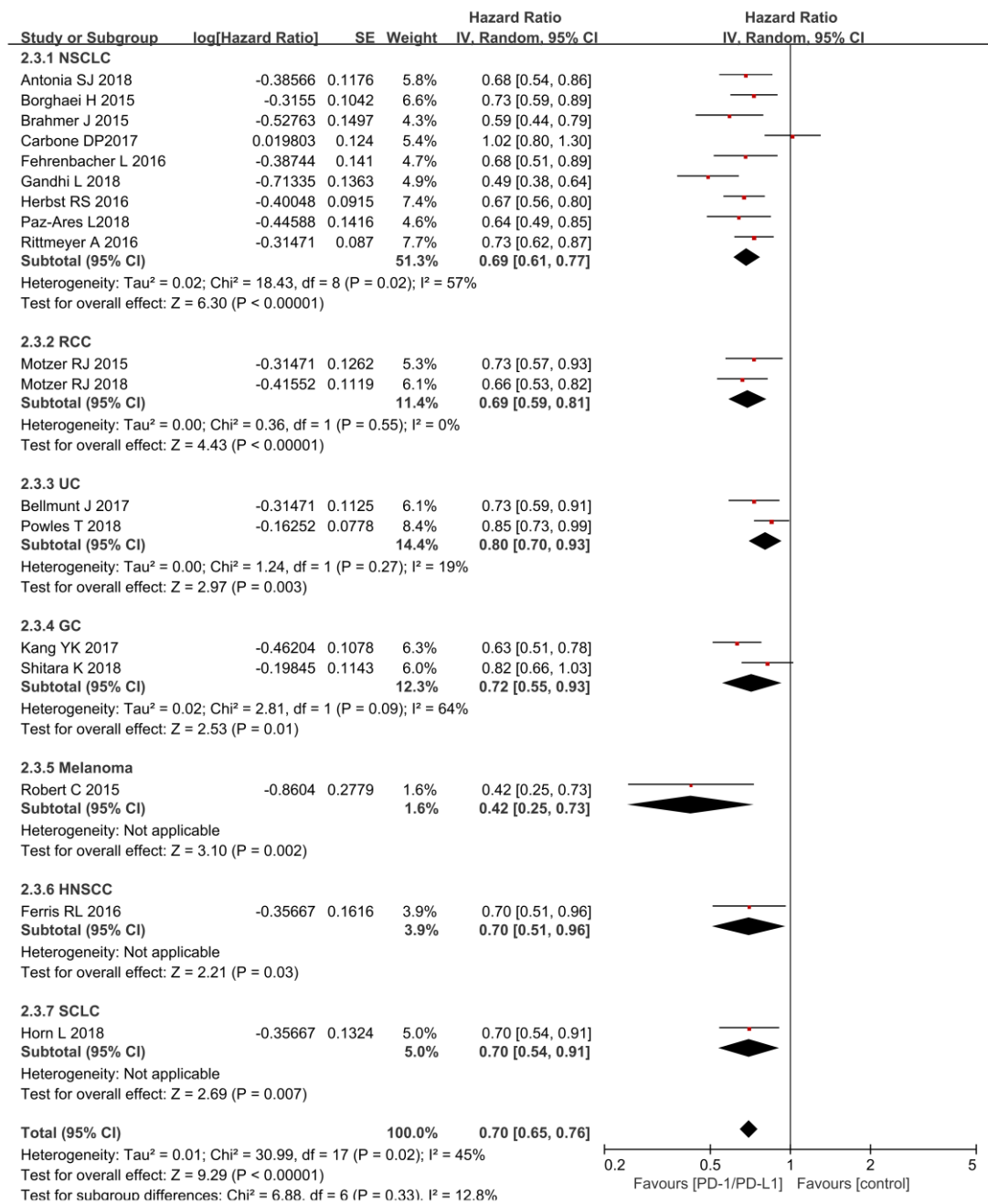
Paz-Ares L 2018	+	+	+	+	+	+	+
Powles T 2018	+	+	-	-	+	+	+
Rittmeyer A 2016	+	+	-	-	+	+	+
Robert C 2015	+	?	+	+	+	+	+
Shitara K 2018	+	+	+	-	+	+	+

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+ Low risk of bias; ? unclear risk of bias; - high risk of bias

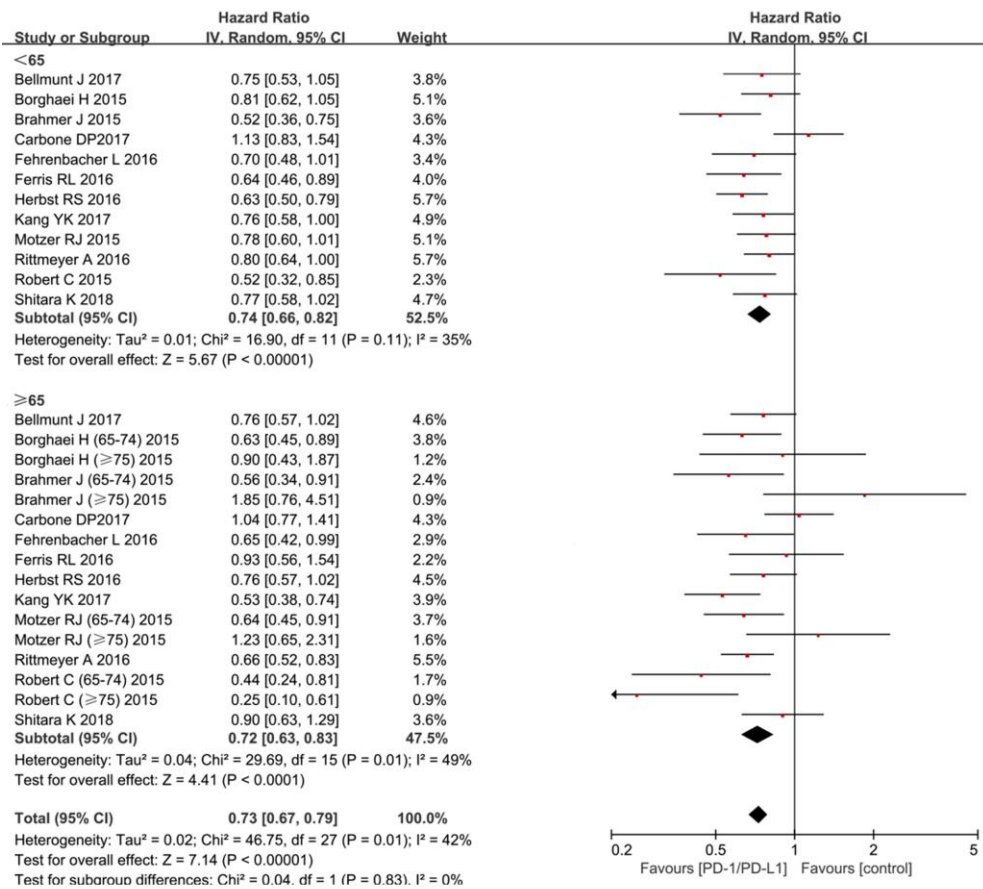


**Figure S1** Forest plot of hazard ratio comparing overall survival in patients who received PD-1/PD-L1 inhibitors versus control for monotherapy group and combination therapy group.

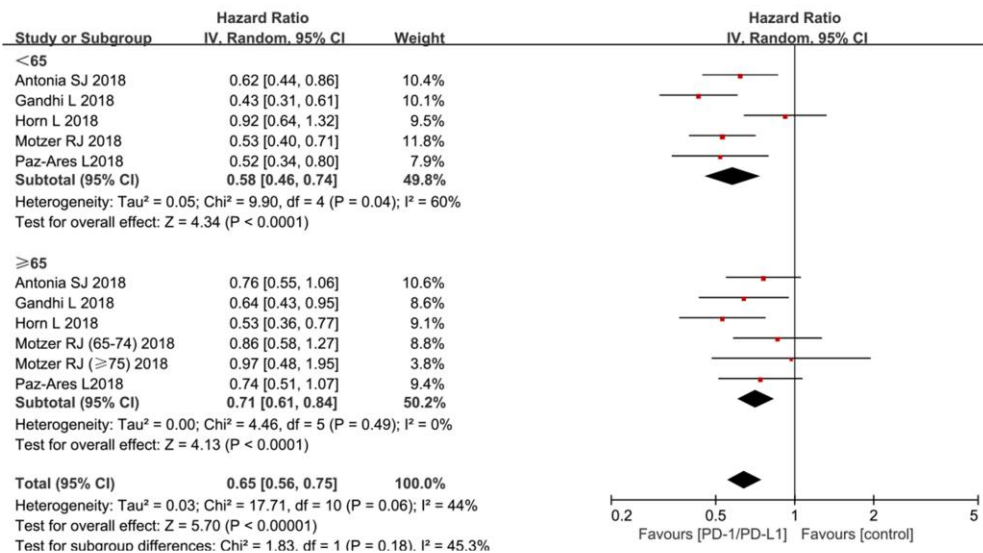


**Figure S2** Forest plot of hazard ratio comparing overall survival in patients who received PD-1/PD-L1 inhibitors versus control by tumor types.

Monotherapy (age subgroup)

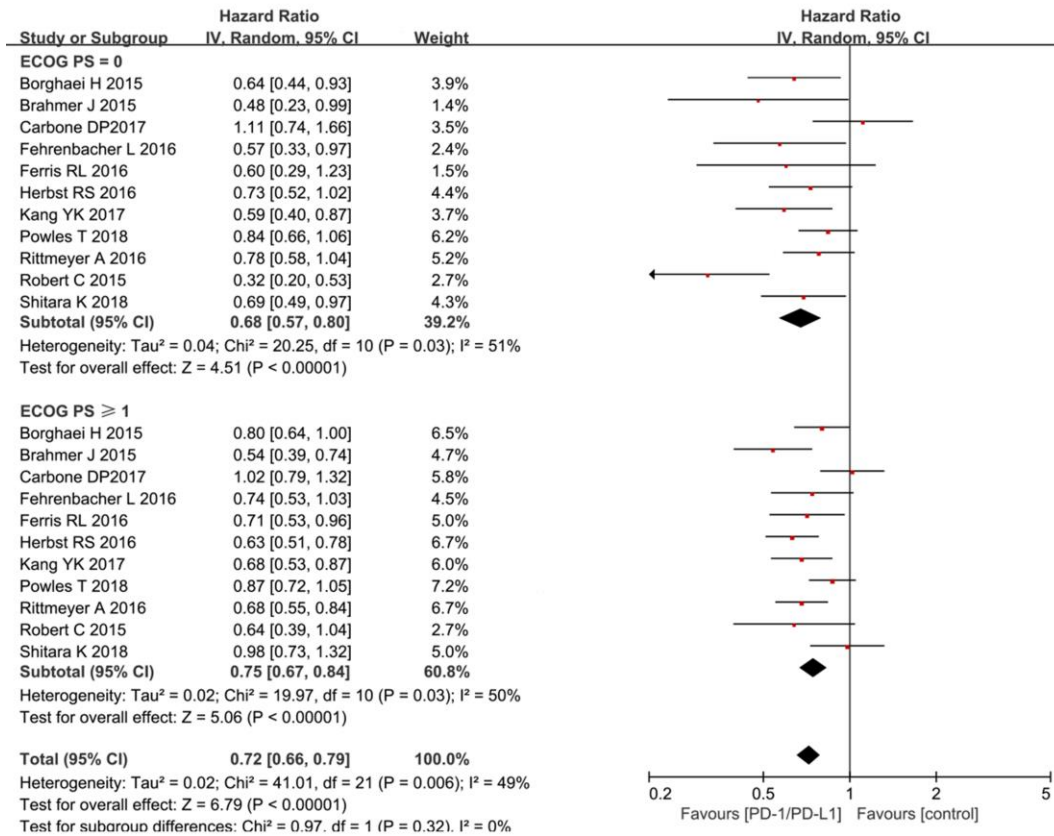


Combination therapy (age subgroup)

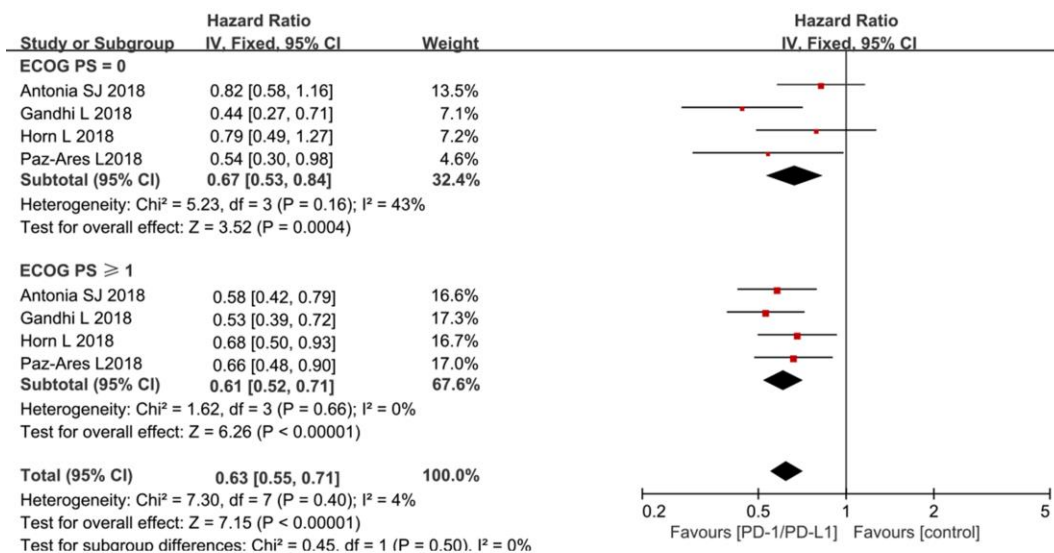


**Figure S3** Forest plot of hazard ratio comparing overall survival in patients who received PD-1/PD-L1 inhibitors versus control by age for (A) monotherapy group and (B) combination therapy group.

Monotherapy (ECOG PS subgroup)

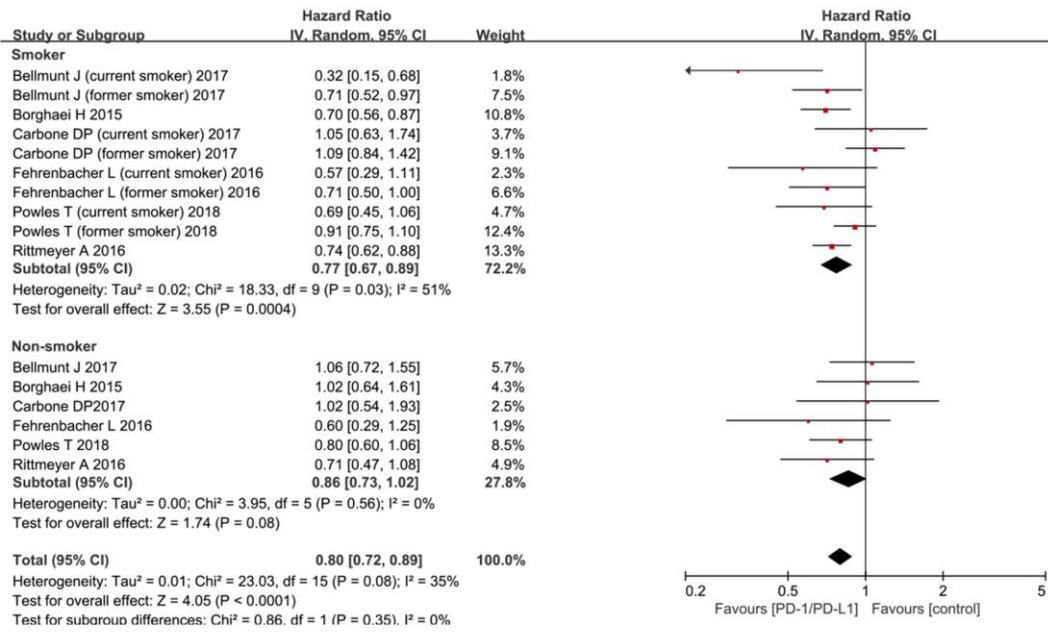


Combination therapy (ECOG PS subgroup)

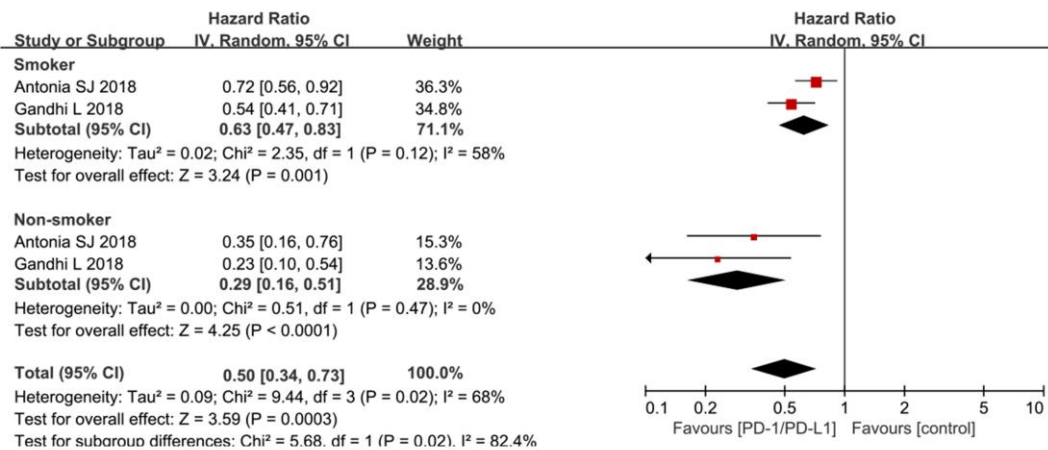


**Figure S4** Forest plot of hazard ratio comparing overall survival in patients who received PD-1/PD-L1 inhibitors versus control by ECOG PS for (A) monotherapy group and (B) combination therapy group.

Monotherapy (smoking subgroup)

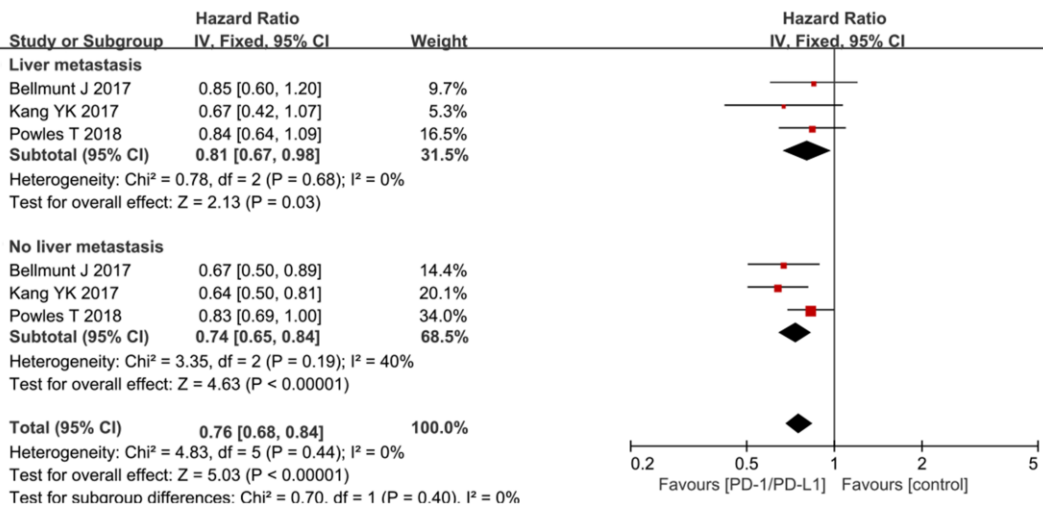


Combination therapy (smoking subgroup)

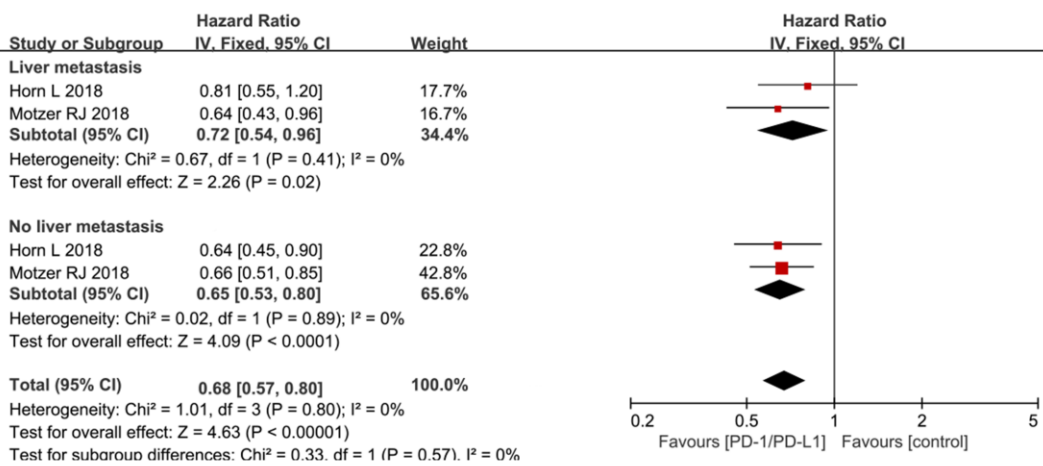


**Figure S5** Forest plot of hazard ratio comparing overall survival in patients who received PD-1/PD-L1 inhibitors versus control by smoking status. (A) monotherapy group and (B) combination therapy group.

Monotherapy (liver metastasis subgroup)



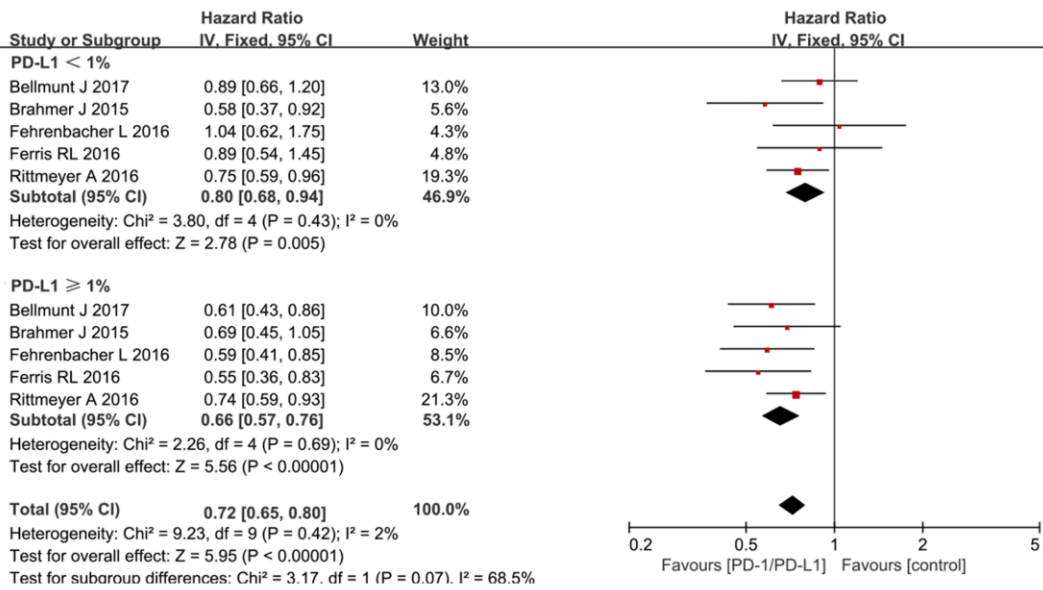
Combination therapy (liver metastasis subgroup)



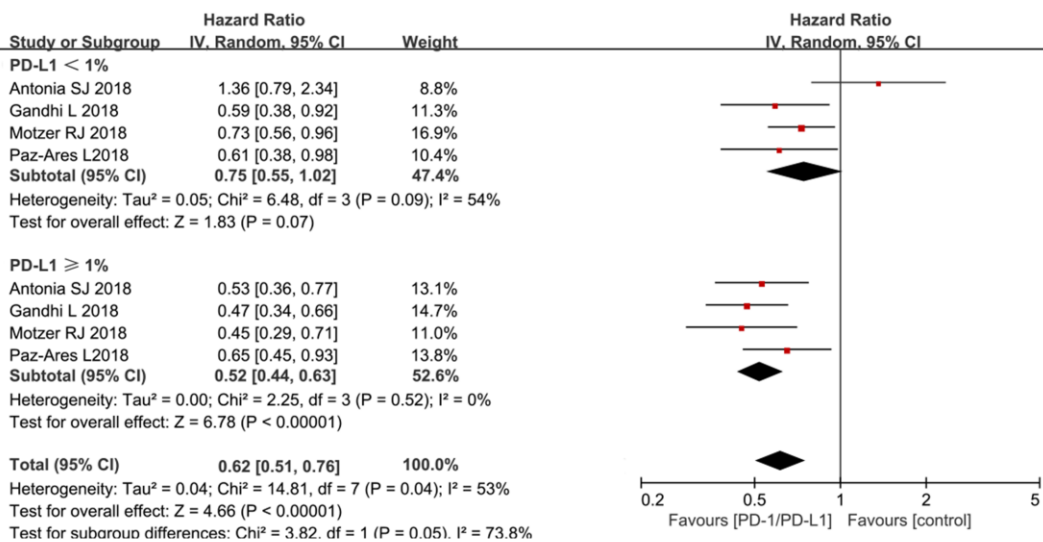
**Figure S6** Forest plot of hazard ratio comparing overall survival in patients who received PD-1/PD-L1 inhibitors versus control by liver metastasis for (A) monotherapy group and (B) combination therapy group.



Monotherapy (PD-L1 subgroup)



Combination therapy (PD-L1 subgroup)

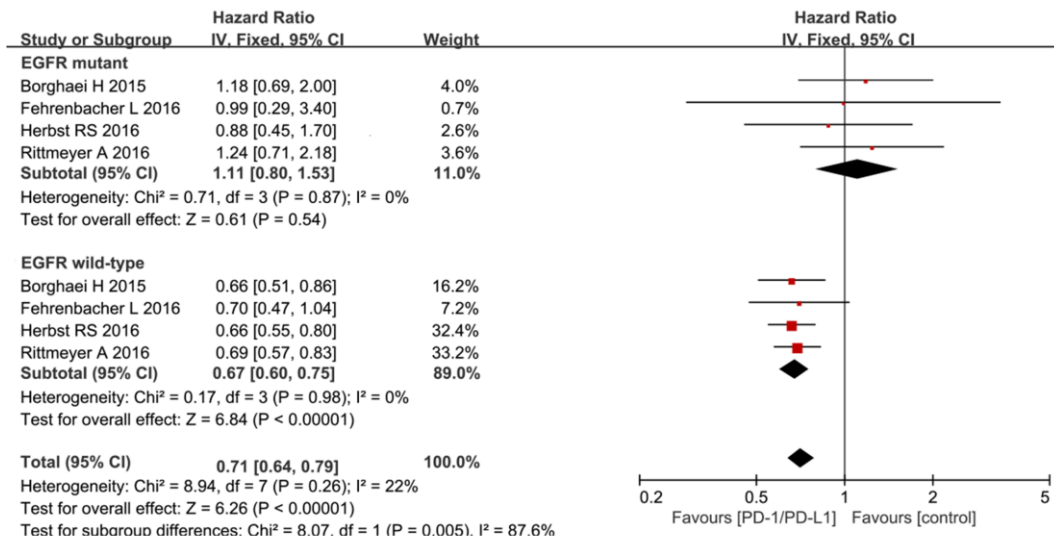


**Figure S7** Forest plot of hazard ratio comparing overall survival in patients who received

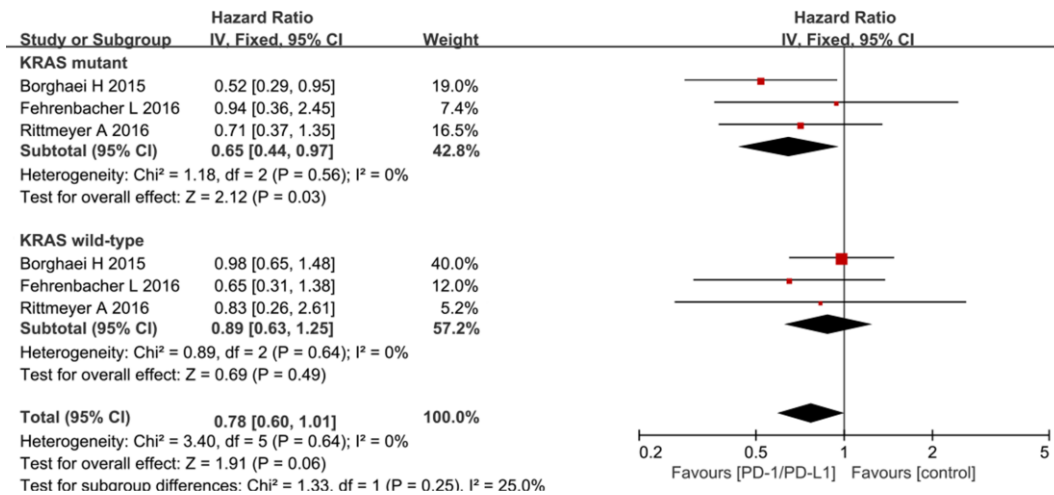
PD-1/PD-L1 inhibitors versus control by PD-L1 expression for (A) monotherapy group and (B)

combination therapy group.

Monotherapy (EGFR subgroup)



Monotherapy (KRAS subgroup)



**Figure S8** Forest plot of hazard ratio comparing overall survival in patients who received PD-1/PD-L1 inhibitors versus control for monotherapy group by (A) EGFR status and (B) KRAS status.