**Supplementary Appendix**

**Heterogeneity analyses**

* **Poor-risk patients**

 Q=1.03; df=2; I2=0%

* **Intermediate-risk patients**

 Q=1.53; df=2; I2=0%

* **Favorable-risk patients**

 Q=1.03; df=2; I2=39%



**Supplementary Figure 1**. Funnel Plot of the Overall Survival (OS) in poor-risk patients, according to IMDC criteria (immune checkpoint inhibitors plus tyrosine kinase inhibitors versus sunitinib monotherapy).



**Supplementary Figure 2**. Funnel Plot of the Overall Survival (OS) in intermediate-risk patients, according to IMDC criteria (immune checkpoint inhibitors plus tyrosine kinase inhibitors versus sunitinib monotherapy).



**Supplementary Figure 3**. Funnel Plot of the Overall Survival (OS) in favorable-risk patients, according to IMDC criteria (immune checkpoint inhibitors plus tyrosine kinase inhibitors versus sunitinib monotherapy).