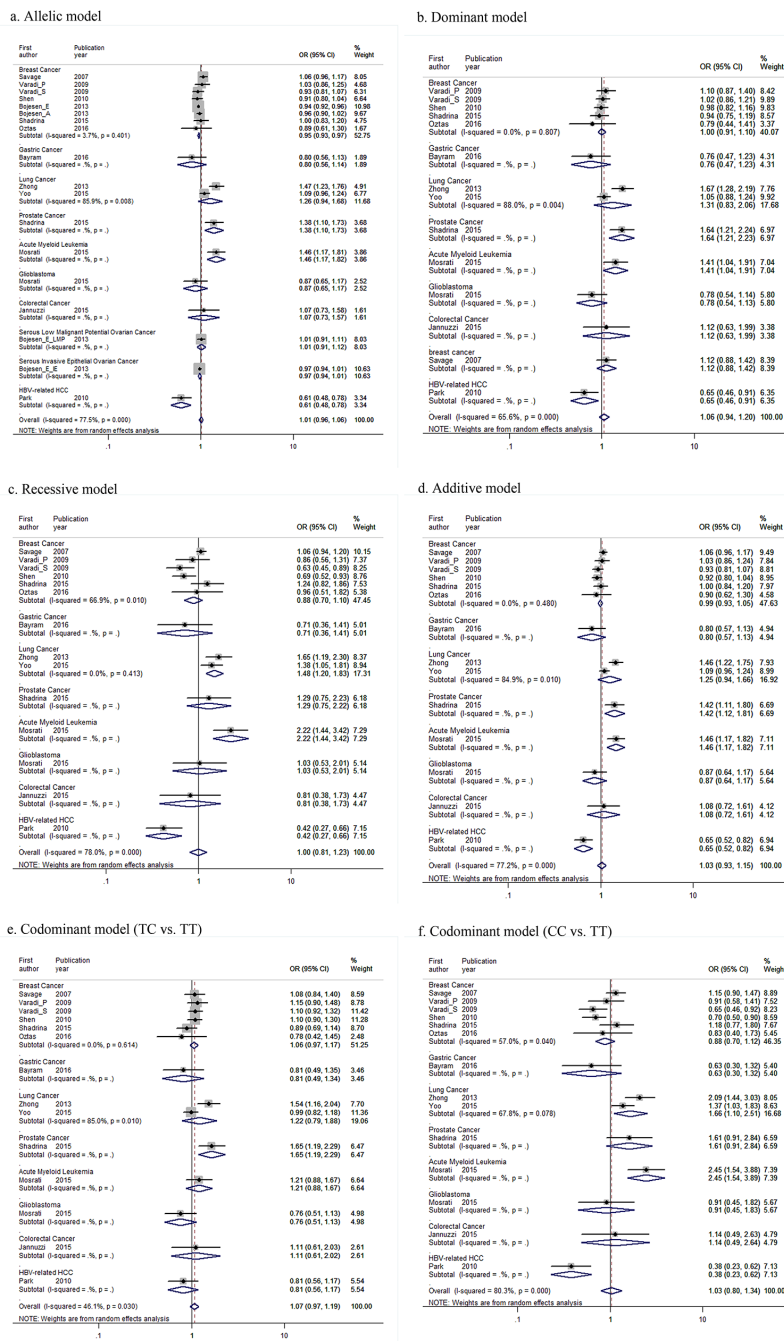


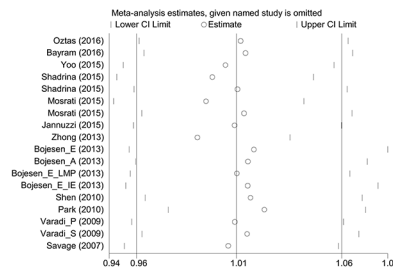
Association between rs2853669 in *TERT* gene and the risk and prognosis of human cancer: a systematic review and meta-analysis

SUPPLEMENTARY MATERIALS

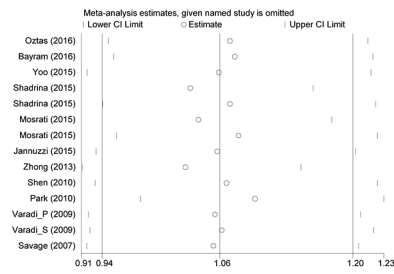


Supplementary Figure 1: Forest plots of the association between rs2853669 and overall cancer risk in the **a.** allelic, **b.** dominant, **c.** recessive, **d.** additive, **e.** TC vs. TT codominant and **f.** CC vs. TT codominant model. Varadi_P, Polish population in the study of Varadi, et al.; Varadi_S, Swedish population in the study of Varadi, et al.; Bojesen_E, Europeans in the study of Bojesen, et al.; Bojesen_A, Asians and African-Americans in the study of Bojesen, et al.; Bojesen_E_LMP, low malignant potential ovarian cancer in Europeans in the study of Bojesen, et al.; Bojesen_E_IE, invasive epithelial ovarian cancer in Europeans in the study of Bojesen, et al.; HCC, hepatocarcinoma.

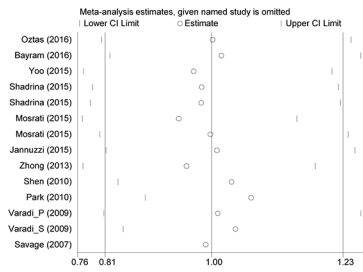
a. Allelic model



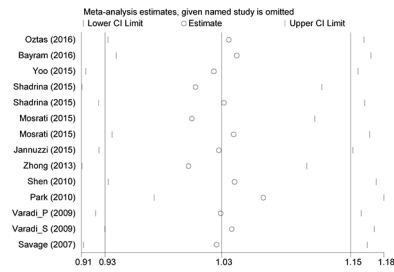
b. Dominant model



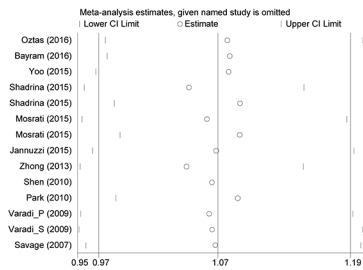
c. Recessive model



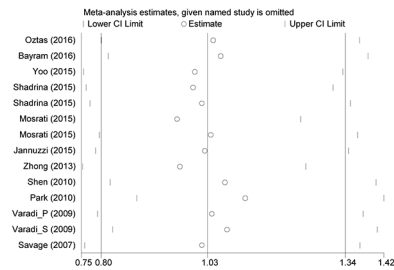
d. Additive model



e. Codominant model (TC vs. TT)

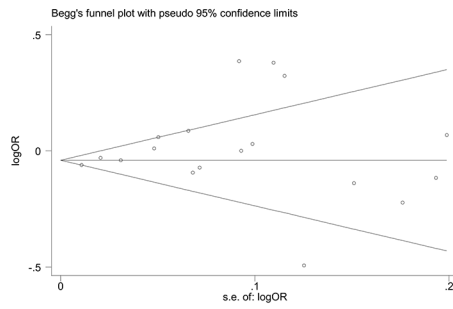


f. Codominant model (CC vs. TT)

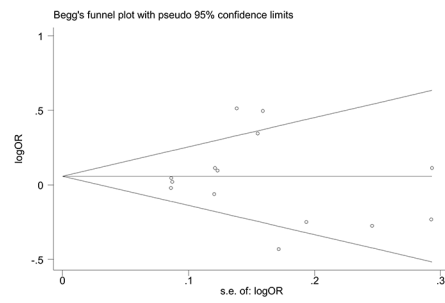


Supplementary Figure 2: Sensitivity analyses plots of the association between rs2853669 and overall cancer risk in the **a.** allelic, **b.** dominant, **c.** recessive, **d.** additive, **e.** TC vs. TT codominant and **f.** CC vs. TT codominant model. Varadi P, Polish population in the study of Varadi, et al.; Varadi_S, Swedish population in the study of Varadi, et al.; Bojesen_E, Europeans in the study of Bojesen, et al.; Bojesen_A, Asians and African-Americans in the study of Bojesen, et al.; Bojesen_E_LMP, low malignant potential ovarian cancer in Europeans in the study of Bojesen, et al.; Bojesen_E_IE, invasive epithelial ovarian cancer in Europeans in the study of Bojesen, et al.

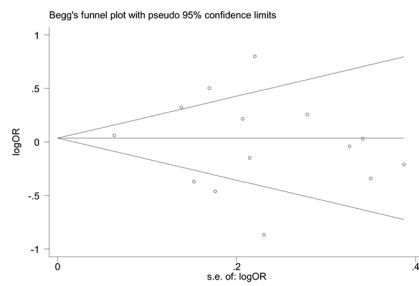
a. Allelic model



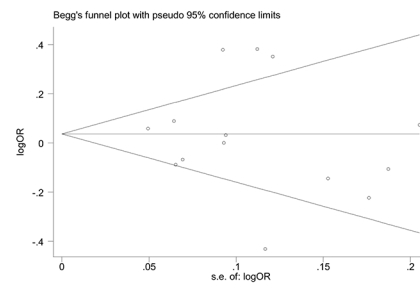
b. Dominant model



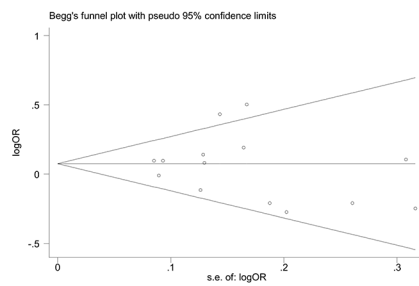
c. Recessive model



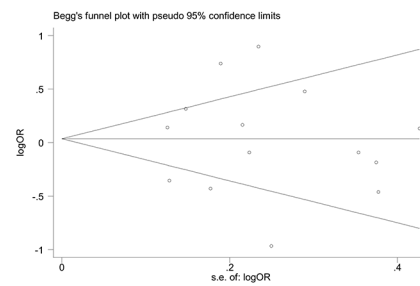
d. Additive model



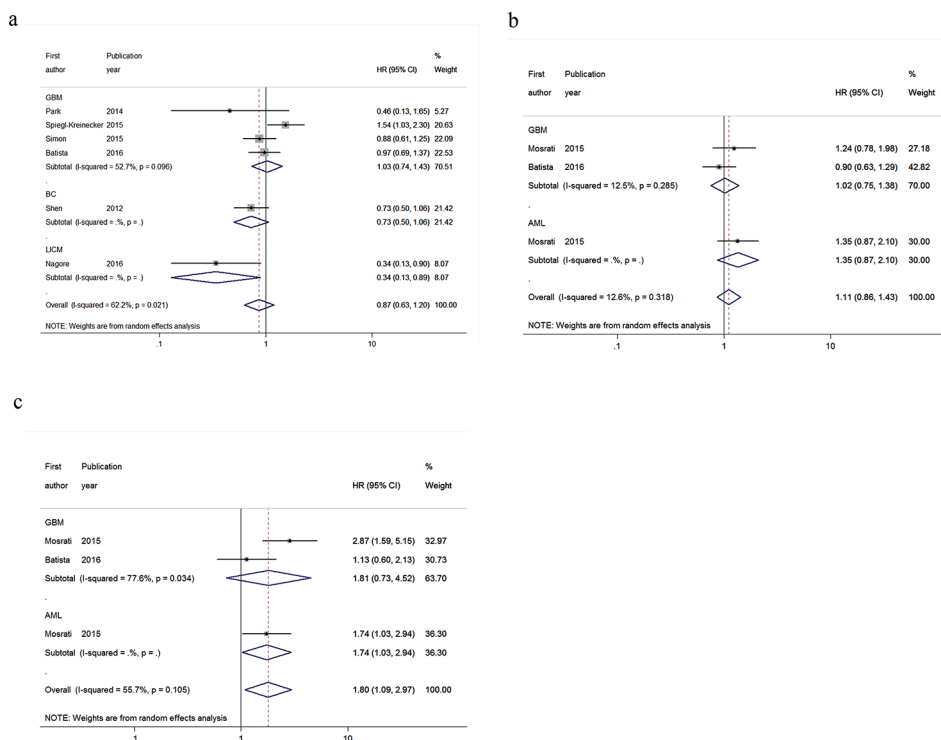
e. Codominant model (TC vs. TT)



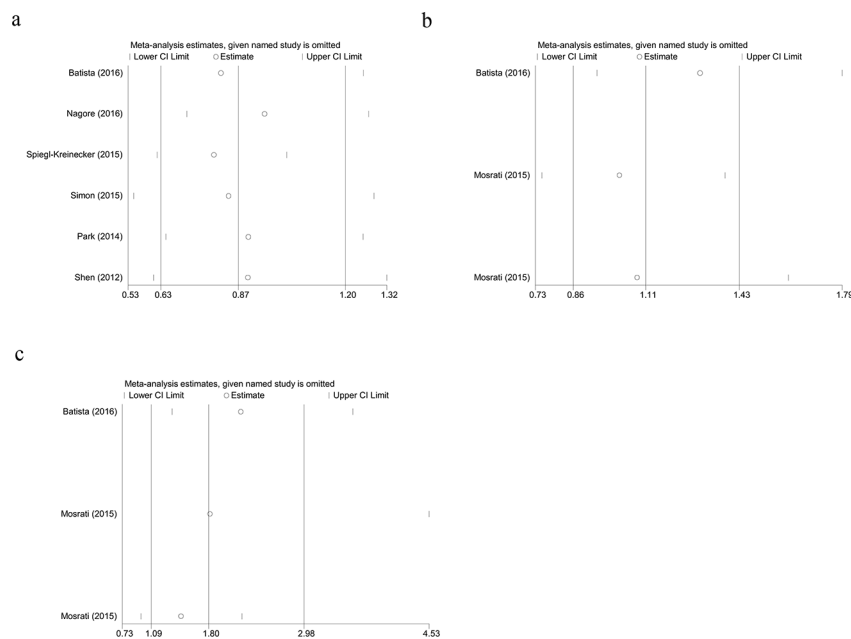
f. Codominant model (CC vs. TT)



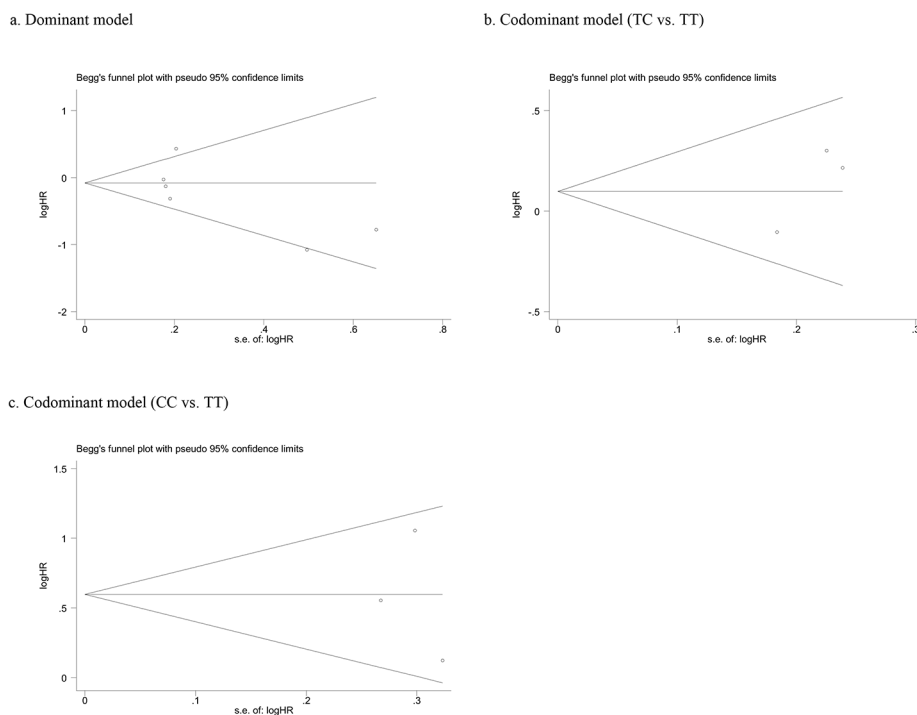
Supplementary Figure 3: Funnel plots of the association between rs2853669 and overall cancer risk in the **a.** allelic, **b.** dominant, **c.** recessive, **d.** additive, **e.** TC vs. TT codominant and **f.** CC vs. TT codominant model.



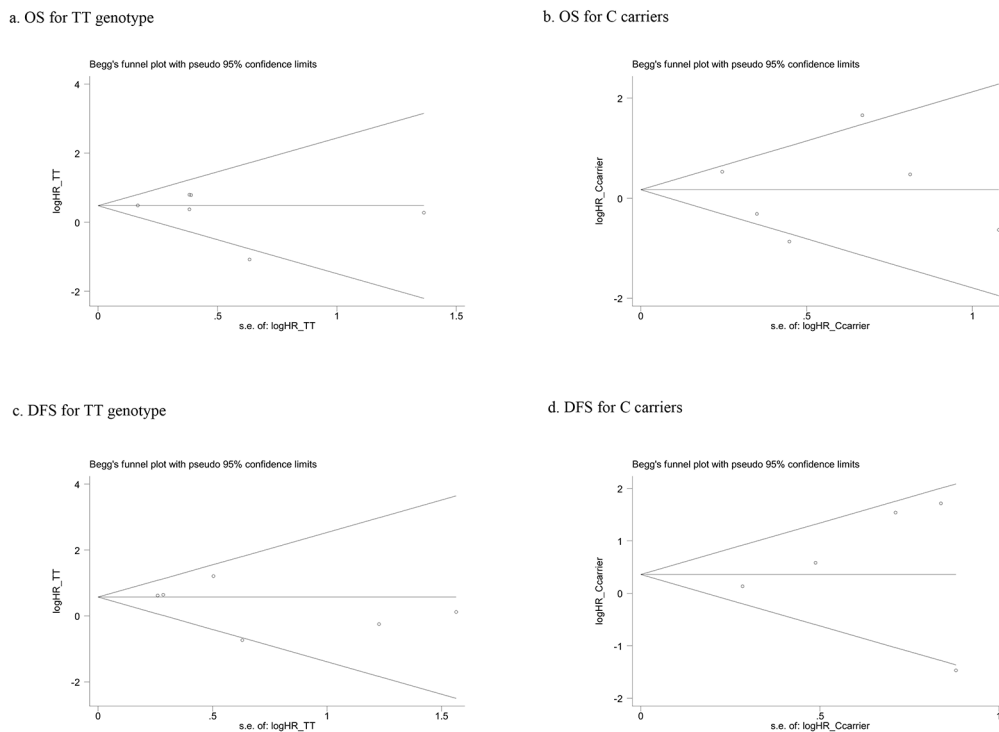
Supplementary Figure 4: Forest plots of the association between rs2853669 and overall survival of cancer in the **a.** dominant, **b.** TC vs. TT codominant and **c.** CC vs. TT codominant model. GBM, glioblastoma; BC, breast cancer; LICM, localized invasive cutaneous melanoma; AML, acute myeloid leukemia.



Supplementary Figure 5: Sensitivity analyses plots of the association between rs2853669 and overall survival of cancer in the **a.** dominant, **b.** TC vs. TT codominant and **c.** CC vs. TT codominant model.

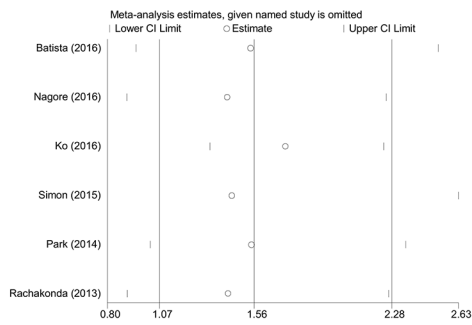


Supplementary Figure 6: Funnel plots of the association between rs2853669 and overall survival of cancer in the **a.** dominant, **b.** TC vs. TT codominant and **c.** CC vs. TT codominant model.

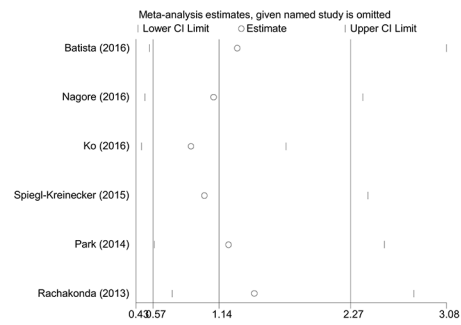


Supplementary Figure 7: Funnel plots of the modifying effect of rs2853669 on *TERTp* mutations for **a.** overall survival and **c.** disease-free survival in cancer patients carrying TT genotype, and for **b.** overall survival and **d.** disease-free survival in cancer patients carrying TC or CC genotype. OS, overall survival; DFS, disease-free survival.

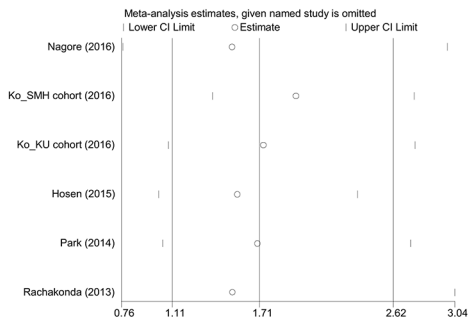
a. OS for TT genotype



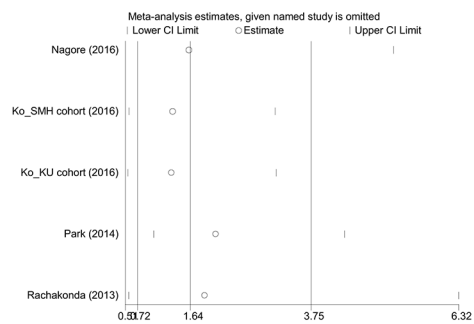
b. OS for C carriers



c. DFS for TT genotype



d. DFS for C carriers



Supplementary Figure 8: Sensitivity analyses plots of the modifying effect of rs2853669 on *TERT* mutations for **a.** overall survival and **c.** disease-free survival in cancer patients carrying TT genotype, and for **b.** overall survival and **d.** disease-free survival in cancer patients carrying TC or CC genotype. OS, overall survival; DFS, disease-free survival.

Supplementary Table 1: Criteria of quality assessment score

Criteria	Scores
Representativeness of case	
Selected from cohort or cancer registry	3
Selected from hospital or clinic centers	2
Selected from self-report data	1
No method of selection described	0
Representativeness of control	
Population-based	3
Blood donors	2
Hospital-based	1
Not described	0
Case ascertainment	
Histopathologic confirmation	2
Patient medical record	1
Not described	0
Control selection	
Controls matched with cases by age and sex	2
Controls matched with cases only by age or by sex	1
Not matched or not described	0
Adjustment of odds ratio (OR)	
OR adjusted by confounders	1
Not described	0
Hardy-Weinberg equilibrium (HWE) in controls	
HWE	1
Deviation from HWE or not mentioned	0
Total sample size	
> 1000	3
501 - 1000	2
201 - 500	1
≤ 200	0