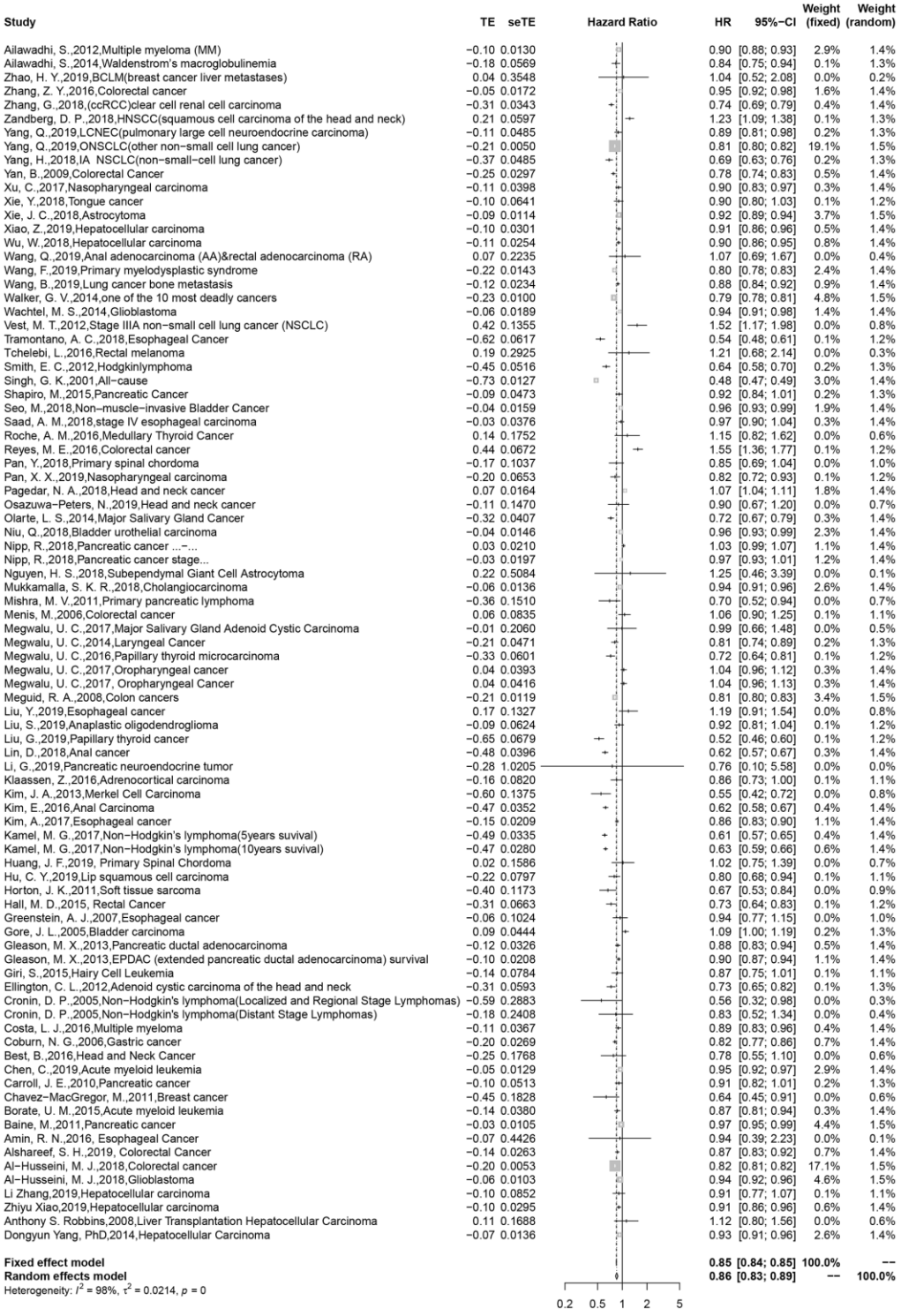
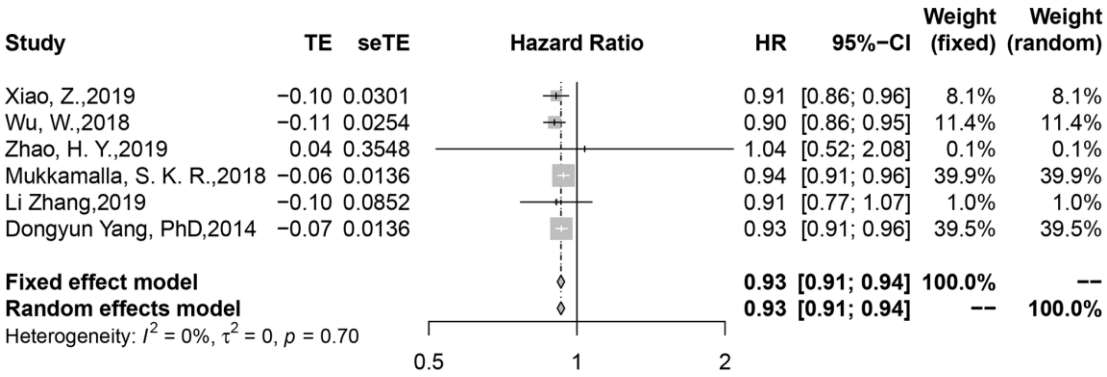
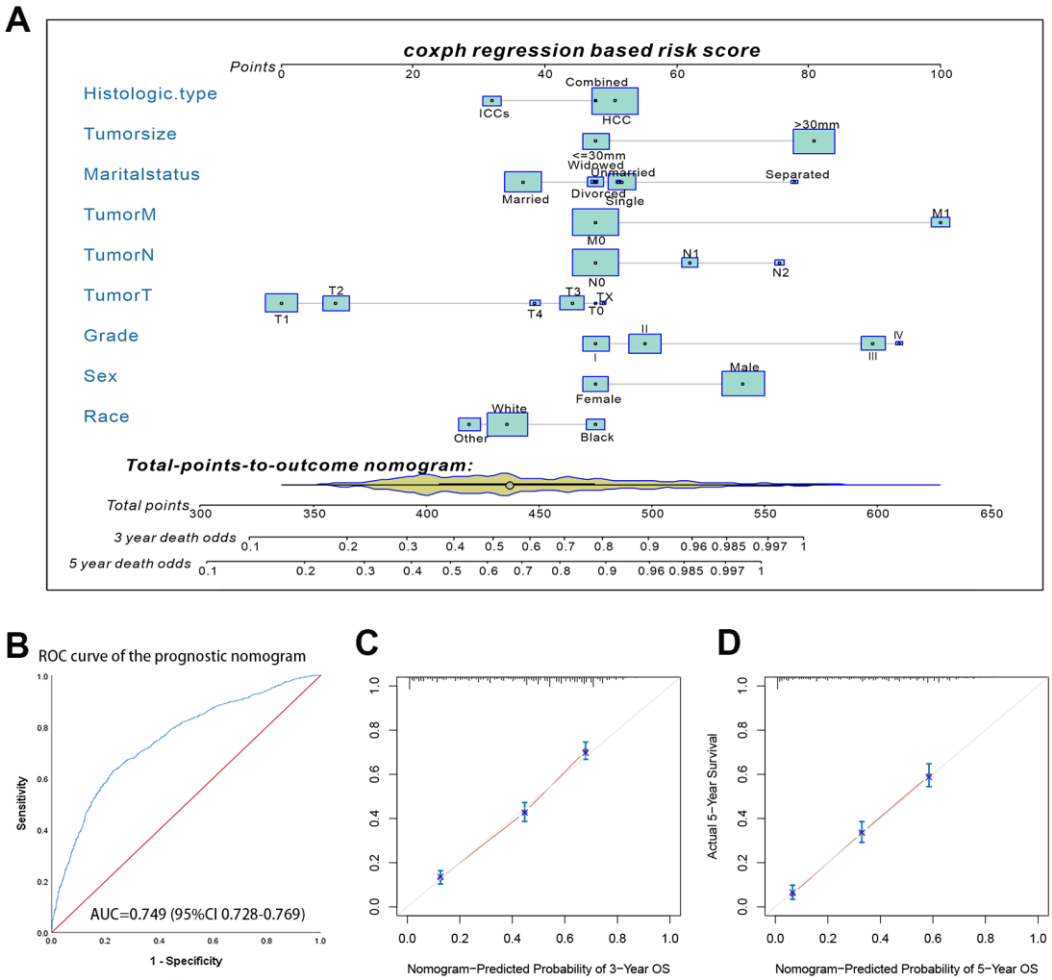
SUPPLEMENTARY FIGURES



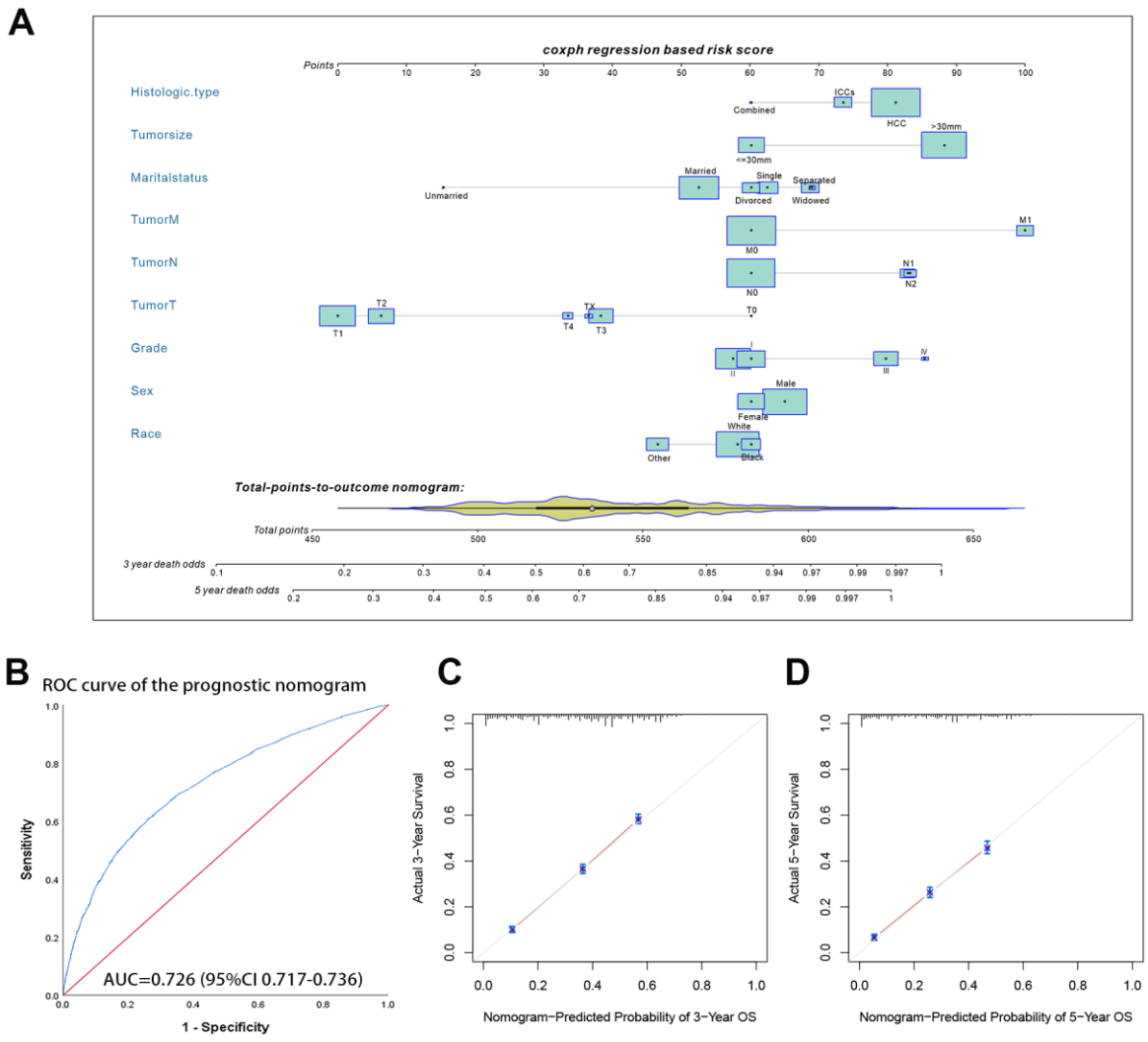
Supplementary Figure 1. Forest plots of the association between gender difference and the risk of cancer patients (Female vs· Male). Each square represents a study, and the size of the square represents the weighting of each study. The diamond box indicates the 95%CI. Heterogeneity is denoted by the I^2 and τ^2· p <0·001 in random effects model. HR= hazard ratio, CI=confidence interval.



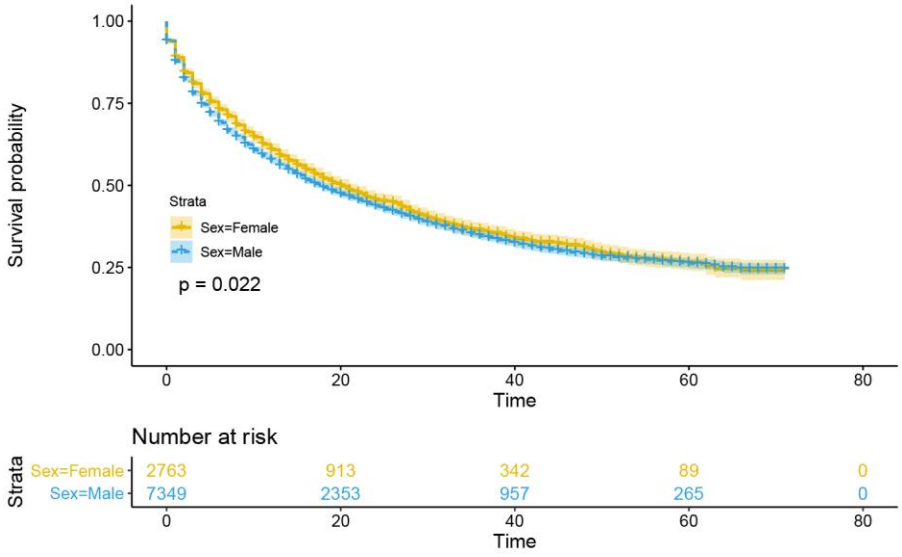
Supplementary Figure 2. Forest plots of the association between gender difference and the risk of liver cancer (Female vs. Male). Each square represents a study, and the size of the square represents the weighting of each study. The diamond box indicates the 95%CI. Heterogeneity is denoted by the I^2 and τ^2. p <0·001 in the fixed effect model. HR= hazard ratio, CI=confidence interval.



Supplementary Figure 3. Nomogram and ROC curve for non-surgical liver cancer patients before women menopause (established by Cox regression model). (**A**) A survival nomogram for predict 3- and 5-year OS rates of non-surgical liver cancer patients before women menopause (i·e·, ≤ 55 years of age). The yellow Violin Plot and the light blue box display the distribution of patients in the primary cohort. The size of the light blue box represents the proportion of patients. (**B**) Receiver operating characteristic (ROC) curves for prediction models. (**C**, **D**) The calibration curve of the nomogram-predicted probability (3-year OS and 5-year OS, respectively). Age, sex, race, grade, tumor TNM stage, marital status, tumor size, and histological type are contained in the models, p<0·001.



Supplementary Figure 4. Nomogram and ROC curve for non-surgical liver cancer patients after women menopause (established by Cox regression model). (**A**) A survival nomogram for predict 3- and 5-year OS rates of non-surgical liver cancer patients after women menopause (i.e., > 55 years of age). The yellow Violin Plot and the light blue box display the distribution of patients in the primary cohort. The size of light blue box represents the proportion of patients. (**B**) Receiver operating characteristic (ROC) curve for prediction models. (**C**, **D**) The calibration curve of the nomogram-predicted probability (3-year OS and 5-year OS, respectively). Age, sex, race, grade, tumor TNM stage, marital status, tumor size, and histological type are contained in the models, p<0·001.



Supplementary Figure 5. Kaplan-Meier survival analysis with log-rank test was performed in non-surgical liver cancer patients after women menopause (i.e. > 55 years of age).