

**Fig. S11.** The complementary cumulative distribution (C) of the gene-gene gravitation score (G) for Cancer Gene Census (CGC) genes in lung adenocarcinoma (LUAD) and lung squamous cell carcinoma (LUSC) smoker and never-smoker (Nonsmoker) patients. The number of gene-gene pairs for blue line is equal to red line by random sampling 100 times. The shadow of blue line represent the standard deviation.