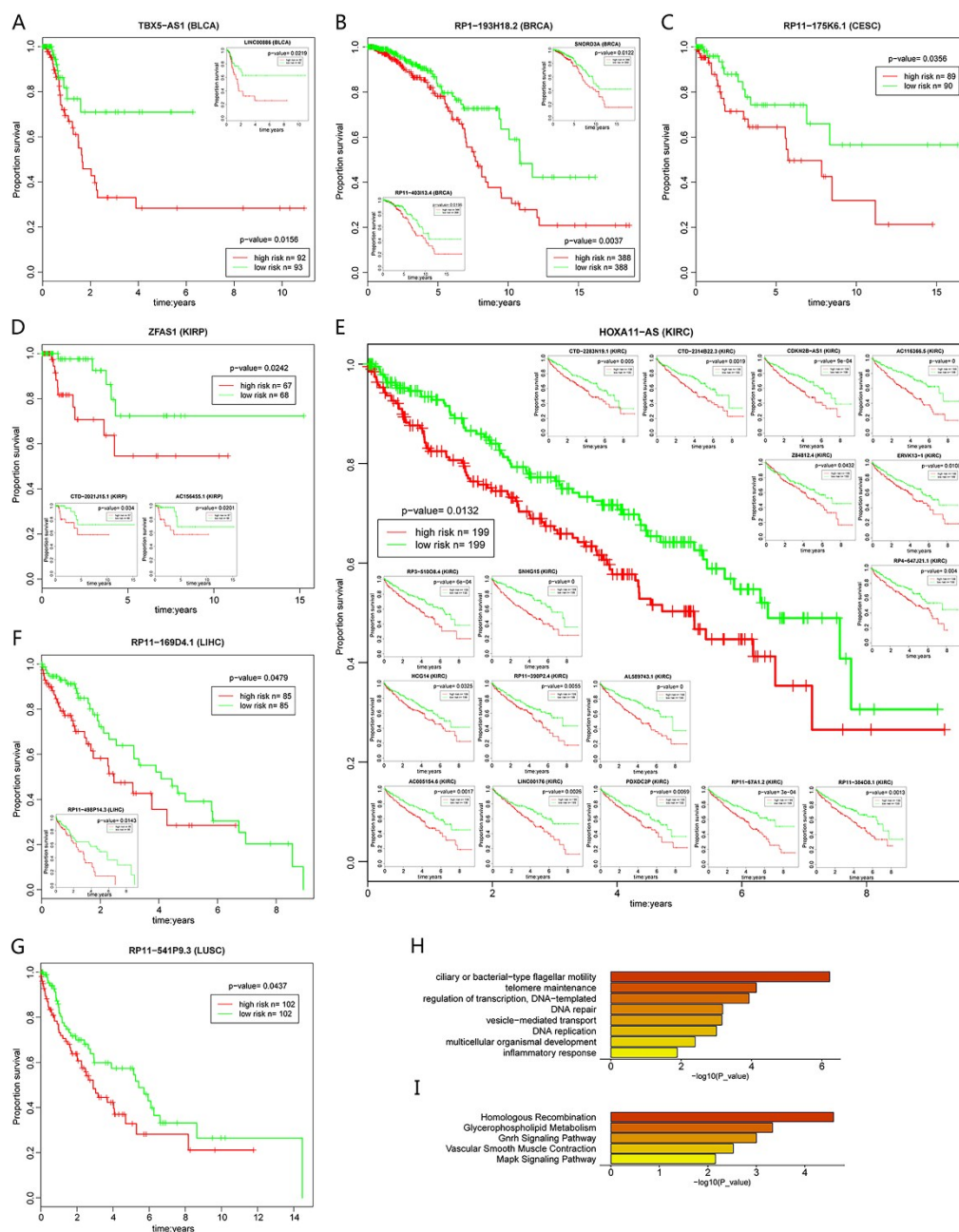
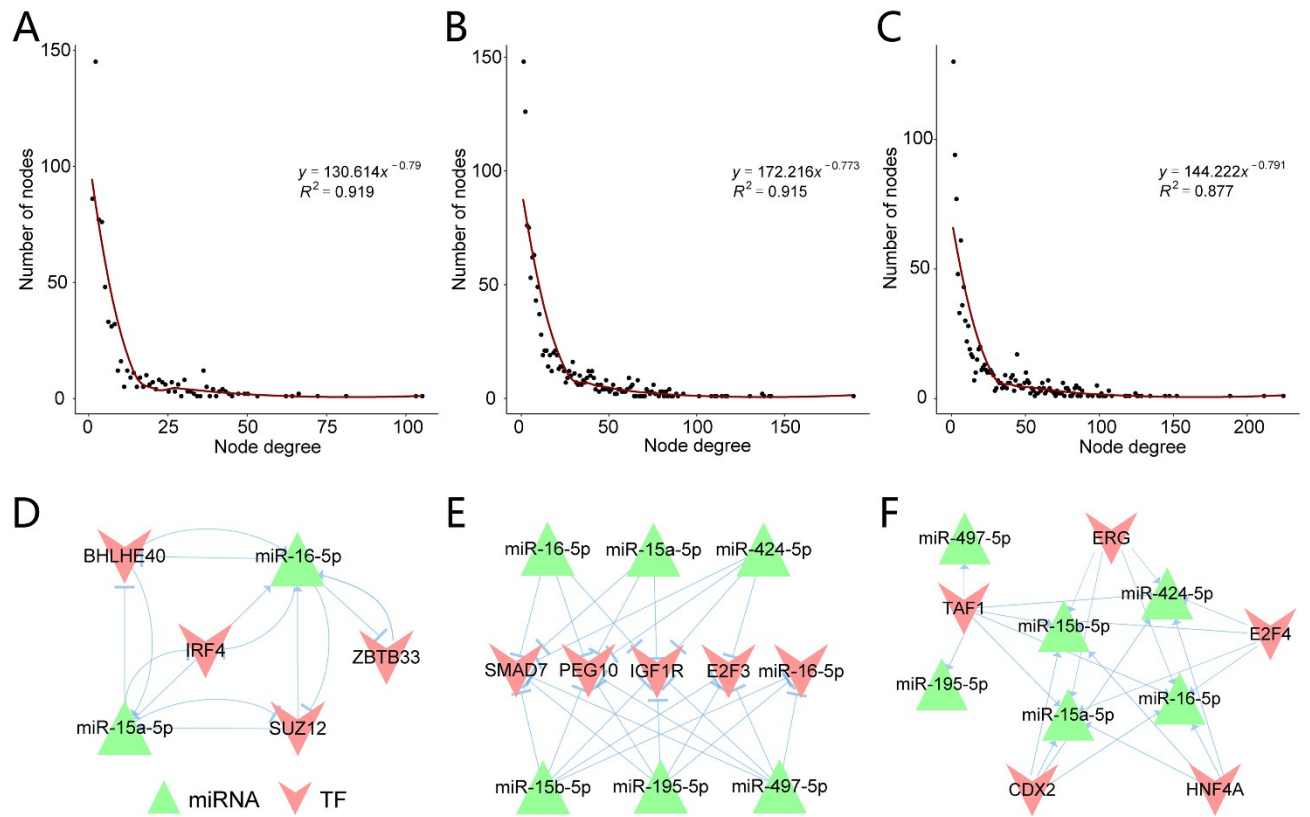


## Supplementary Figures



**Fig. S1. Survival analysis of lncRNAs.** The red line represents the high-risk group and the green line represents the low-risk group. Samples with low risk were found to have longer survival. (A-G) Survival results of the remaining 30 lncRNAs in 8 cancer types. (H-I) Functional annotation and pathway enrichment of lncRNA SNHG15.



**Fig. S2. Network characteristics.** (A-C) The node degree distribution of the co-regulatory network involving motif M1(A), M2(B) and M3(C), respectively. The x-axis indicates degree of node, and the y-axis indicates the frequency of nodes on the basis of the x-axis. (D-F) The hub-networks constructed by hub elements of motif M1(D), M2(E) and M3(F).



**Fig. S3. Functional enrichment of lncRNAs in different groups.** Blue, low dosage sensitivity score group. Green, medium dosage sensitivity score group. Red, high dosage sensitivity score group. Dot size represents the log<sub>2</sub>-transformed P-value calculated by the hypergeometric test.

## Supplementary Tables Legends

**Table S1. The number of lncRNAs contained in high and low regulatory groups**

Group	Number of lncRNAs in the group	Number of cancer related lncRNAs	Number of non-cancer related lncRNAs
High regulatory group	886	34	852
Low regulatory group	4960	10	4950
Total	5846	44	5802

**Table S2. MiRNAs and TFs in 3 hub-networks**

Hub	Related-cancer	PMID
miR-16-5p	Multiple cancers	19903841
miR-15a-5p		19549910

miR-15b-5p	Prostate adenocarcinoma Glioma	29363862 24995320
miR-195-5p miR-497-5p	Multiple cancers	28529562 24909281 23544130
miR-424-5p	Cervical cancer	28082020
ZBTB33	Multiple cancers	27694442
BHLHE40	Uterine Corpus Endometrial Carcinoma	26391953
IRF4	Peripheral T-cell lymphomas	25833963
SUZ12	Bladder Urothelial Carcinoma	26268246
SMAD7	Colorectal cancer	28300830
	Liver hepatocellular carcinoma	28192402
PEG10	Pancreatic adenocarcinoma	28193232
	Liver hepatocellular carcinoma	27370270
IGF1R	Stomach adenocarcinoma	28223169
	Non-small-cell lung cancer	20351332
E2F3	Glioma	25040912
	Lung cancers	16938365
	Stomach adenocarcinoma	25871967
CBFB	Colorectal cancer	19156145
	Leukemia	23979164
ERG	Prostate adenocarcinoma	30042415
	Leukemia	23974202
TAF1	Multiple cancers	27159579
	Cervical cancer and breast invasive carcinoma	18684994
E2F4	Pancreatic adenocarcinoma	28987387
	Bladder Urothelial Carcinoma	26032289
	Breast invasive carcinoma	25440089
	Multiple cancers	30047092
CDX2	Colon adenocarcinoma	26789870
HNF4A	Head and neck squamous cell carcinoma	28782802
	Kidney renal clear cell carcinoma	25961905
	Gastrointestinal cancer	25488664