Supplementary Table 1 Relationship between PIGU mRNA expression and clinicopathological characteristics

Parameters	Group	Number of cases		chi-square test (χ^2)	p-value
		High PIGU expression group	Low PIGU expression group		
Age	≤68	99	102	0.089	0.766
	>68	104	101		
Gender	Male	149	151	0.051	0.821
	Female	54	52		
Race	White	164	158	2.498	0.295
	Asian	18	26		
	Black	9	14		
Packs smoked per year	≤30	55	61	2.779	0.095
	>30	61	43		
Status	Alive	107	119	1.579	0.209
	Dead	96	83		
T stage	T1-T2	62	59	0.227	0.634
	T3-T4	122	129		
N stage	N0	112	124	0.367	0.545
	N1-N3	65	63		
M stage	M0	100	95	0.637	0.425
	M1	7	4		
Pathological stage	I-II	68	63	0.320	0.847
	III	68	72		
	IV	66	67		
Histological grade	Low Grade	9	12	0.437	0.509
	High Grade	192	190		

Supplementary Table 2 The information of six cell cycle-related pathw

ays in the enrichment analysis results

ID	Description	Gene Ratio	p.adjust	geneID
hsa04110	Cell cycle	29/582	0.0000244781	ANAPC11/AURKB/BUB1/CCNA2/CCNB1/CCNB2/CCNE1/CDC25A/CDT1/CHEK1/CHEK2/ESPL1/GSK3B/HDAC1/HDAC2/MAD2L1/MAD2L1BP/MCM2/MCM4/PCNA/RBL1/TFDP1/TTK/YWHAB/ANAPC7/E2F2/E2F3/MDM2/ZBTB17
GO:0044772	mitotic cell cycle phase transition	70/1173	9.75E-09	ANAPC11/ANLN/AURKA/AURKB/BID/BIRC5/BUB1/CCNA2/CCNB1/CCNB2/CCNE1/CCNF/CDC25A/CDCA8/CDKN3/CDT1/CHEK1/CHEK2/CHFR/CKS1B/CKS2/CPSF3/DONSON/DTL/E2F6/E2F7/ESPL1/EZH2/INCENP/IQGAP3/KIF14/MAD2L1/MAD2L1BP/MELK/RBL1/RCC1/RFWD3/RRM1/RRM2/SIRT7/SMARCD2/SPC25/STIL/TFDP1/TMOD3/TOPBP1/TRIAP1/TTK/UBE2C/ZWILCH/ZWINT/ADAM17/ANAPC7/CCNO/CENPF/CLSPN/DPF1/E2F3/FBXL6/GTSE1/LCMT1/MDM2/MIIP/PRAP1/RCC2/SMARCB1/TAOK1/TAOK2/XRCC3/TACC3
GO:0007093	mitotic cell cycle checkpoint signaling	33/1173	1.48E-08	AURKB/BIRC5/BUB1/CCNB1/CDCA8/CDT1/CHEK1/CHEK2/CHFR/DONSON/DTL/FANCD2/INCENP/MAD2L1/MAD2L1BP/MSH2/RFWD3/SPC25/TOPBP1/TRIAP1/TTK/ZWILCH/ZWINT/CENPF/CLSPN/GTSE1/LCMT1/MDM2/PRAP1/RAD9A/TAOK1/TAOK2/XRCC3
GO:0044784	metaphase/anaphase transition of cell cycle	26/1173	5.08E-08	ANAPC11/AURKB/BIRC5/BUB1/CCNB1/CDCA8/CDT1/CHFR/ESPL1/INCENP/MAD2L1/MAD2L1BP/SMARCD2/SPC25/TTK/UBE2C/ZWILCH/ZWINT/ANAPC7/CENPF/DPF1/LCMT1/PRAP1/SMARCB1/XRCC3/TACC3
GO:1901987	regulation of cell cycle phase transition	65/1173	6.12E-08	ANAPC11/ANLN/AURKA/AURKB/BID/BIRC5/BUB1/CCNB1/CDC25A/CDCA8/CDT1/CHEK1/CHEK2/CHFR/CPSF3/DONSON/DTL/E2F7/ESPL1/EZH2/FANCD2/INCENP/INTS7/KIF14/MAD2L1/MAD2L1BP/MSH2/OVOL1/RBL1/RFWD3/RRM1/RRM2/SMARCD2/SPC25/STIL/TFDP1/TIMELESS/TMOD3/TOPBP1/TRIAP1/TTK/UBE2C/ZWILCH/ZWINT/ADAM17/ANAPC7/ATF5/CENPF/CLSPN/DDRGK1/DPF1/FBXO6/GTSE1/LCMT1/MDM2/MEN1/MIIP/PRAP1/RAD9A/RCC2/SMARCB1/TAOK1/TAOK2/THOC1/XRCC3

GO:0 00007 5	cell cycle ch eckpoint sig naling	37/1 173	6.47 E-08	AURKB/BIRC5/BUB1/CCNB1/CDCA8/CDT1/CHEK1/CHEK2/CHFR/DONSON/DT L/FANCD2/INCENP/INTS7/MAD2L1/MAD2L1BP/MSH2/RFWD3/SPC25/TIMELE SS/TOPBP1/TRIAP1/TTK/ZWILCH/ZWINT/CENPF/CLSPN/FBXO6/GTSE1/LCMT 1/MDM2/PRAP1/RAD9A/TAOK1/TAOK2/THOC1/XRCC3
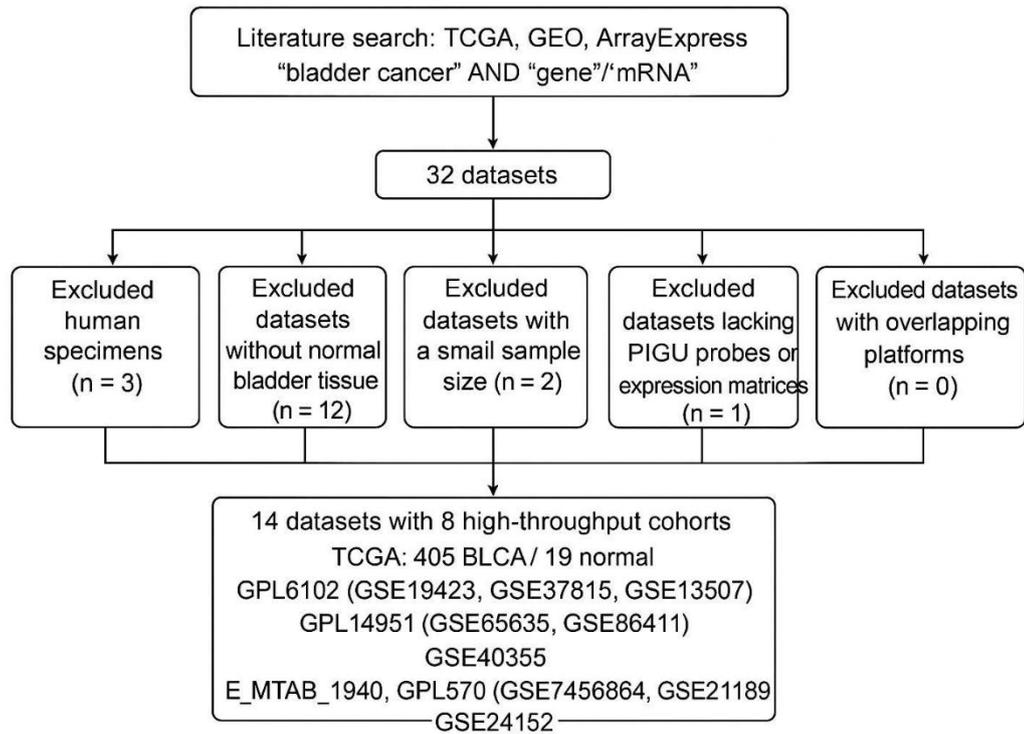
Supplementary Figure 1 Parameters for all data set screening steps.
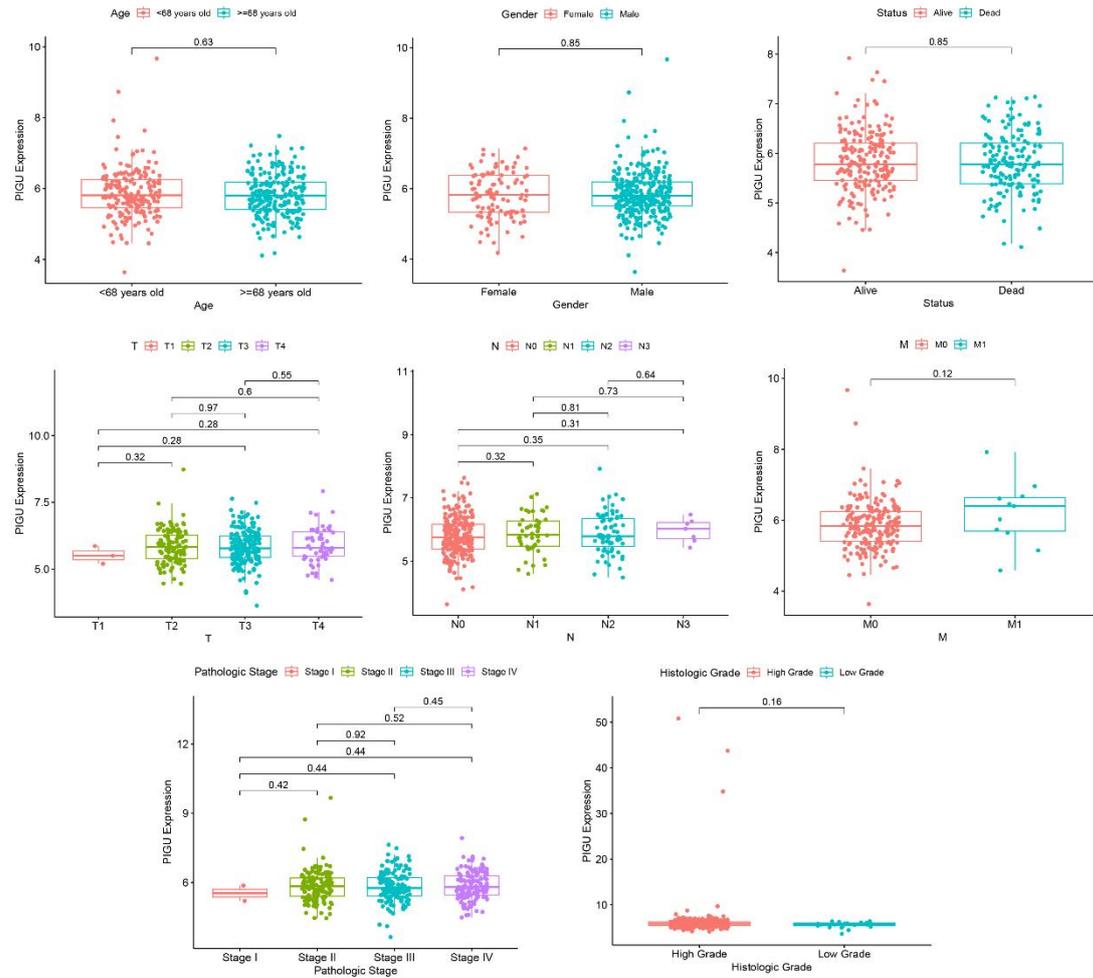
Supplementary Figure 2 Relationship between *PIGU* mRNA expression and clinical pathological parameters.