

Table S1. Correlations between metabolite changes and cancer stage.

Metabolites	Fold change <sup>a,d</sup>	P-value <sup>d</sup>	Fold change <sup>a,e</sup>	P-value <sup>e</sup>	Fold change <sup>b,d</sup>	P-value <sup>d</sup>	Fold change <sup>b,e</sup>	P-value <sup>e</sup>	Fold change <sup>c,d</sup>	P-value <sup>d</sup>	Fold change <sup>c,e</sup>	P-value <sup>e</sup>
Bilirubin	0.2	4.15E-02	0.42	1.68E-01	10.19	5.40E-01	0.77	1.68E-01	-	-	-	-
Retinal	0.02	4.76E-01	0.47	4.98E-02	0.07	5.01E-01	1.52	3.22E-01	-	-	-	-
Histamine	4.59	2.60E-01	0.37	4.61E-03	-	-	-	-	9.7	3.71E-02	2.06	3.55E-03
Thiamine	0.39	8.39E-02	0.31	4.13E-04	-	-	-	-	0.71	4.09E-01	0.63	4.11E-02

<sup>a</sup>Pre-gemcitabine BCa tissues/pre-gemcitabine normal tissues. <sup>b</sup>Post-gemcitabine BCa tissues/pre-gemcitabine normal tissues. <sup>c</sup>Post-gemcitabine normal tissues/pre-gemcitabine normal tissues. <sup>d</sup>Ta/TI stage. <sup>e</sup>T2 stage. BCa, bladder cancer.