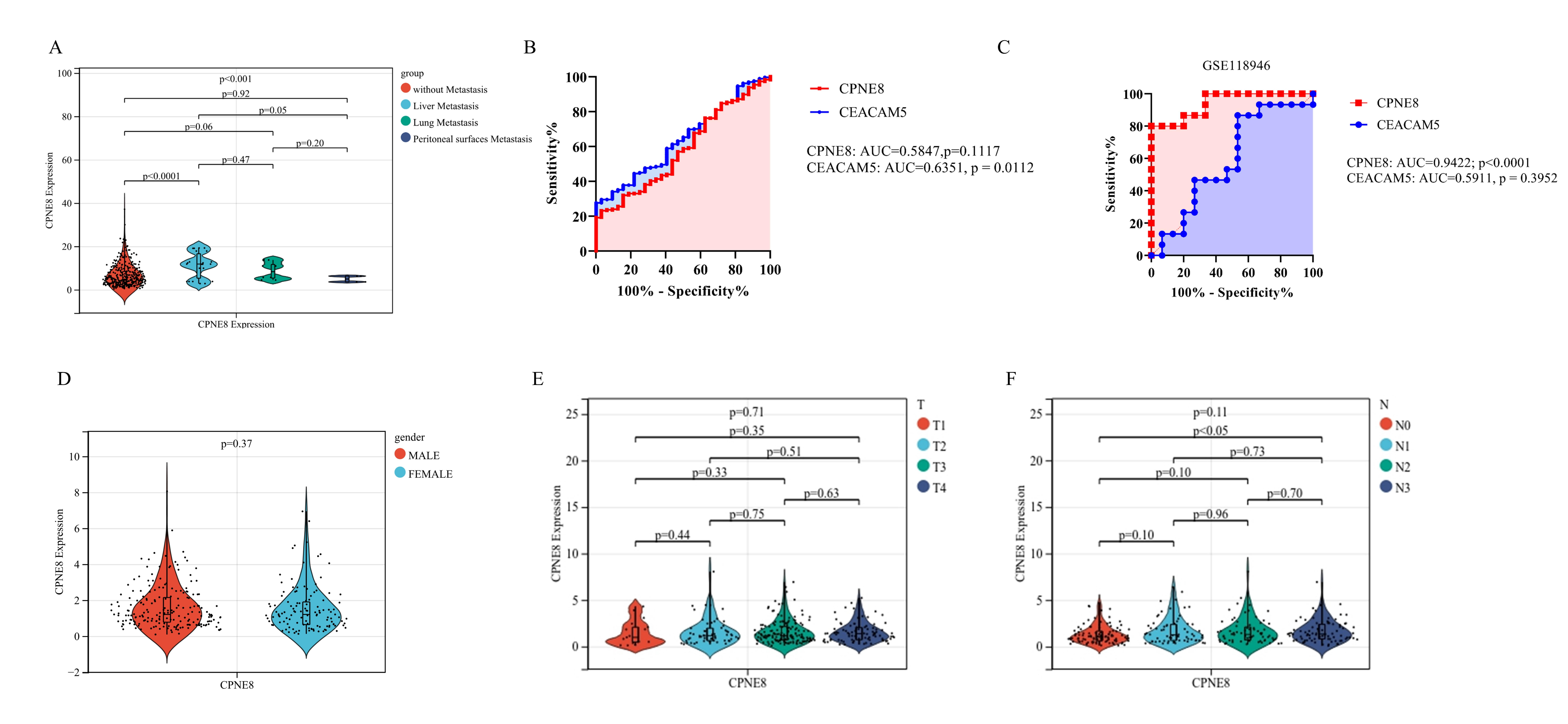
SUPPLEMENTARY MATERIAL

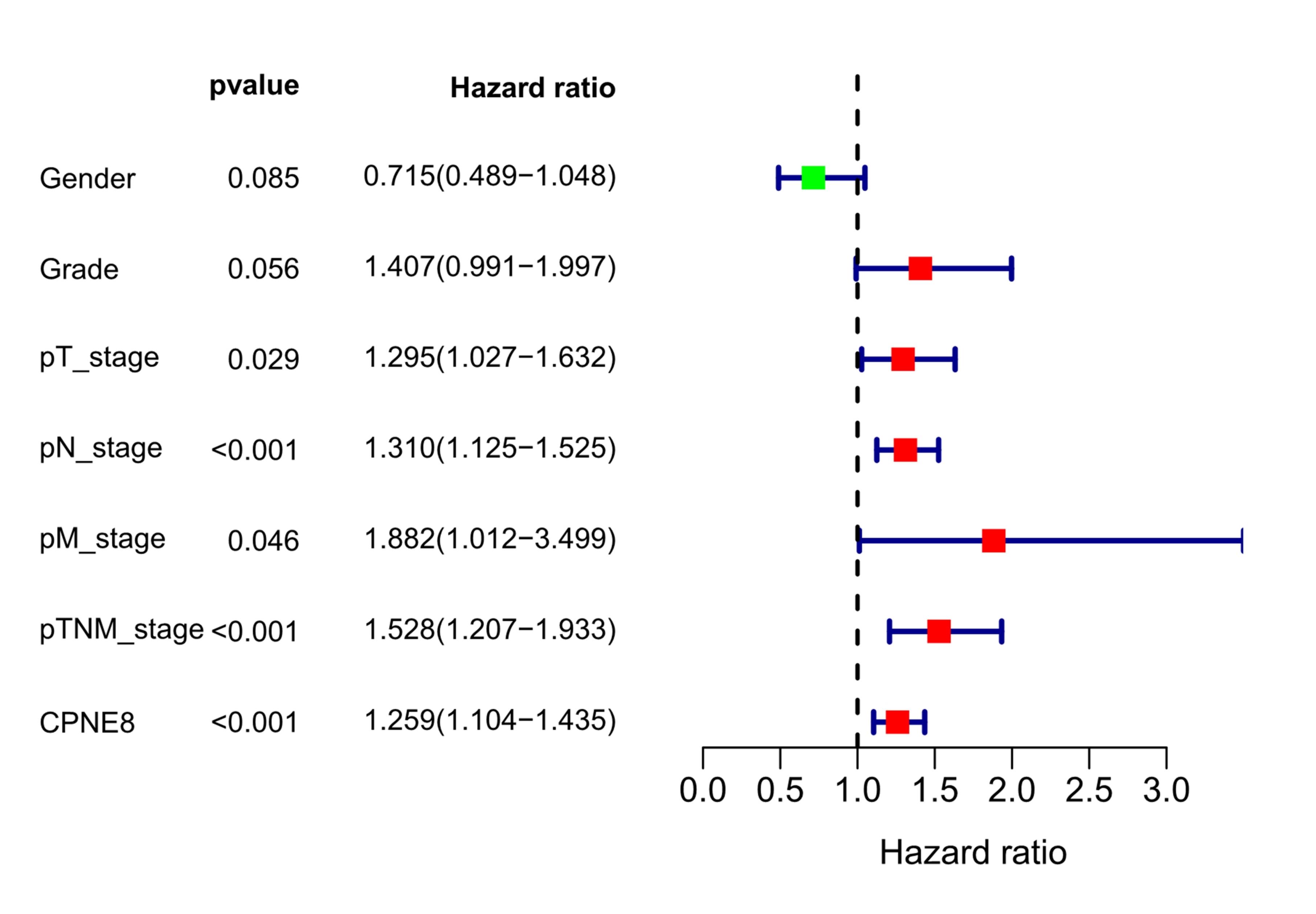
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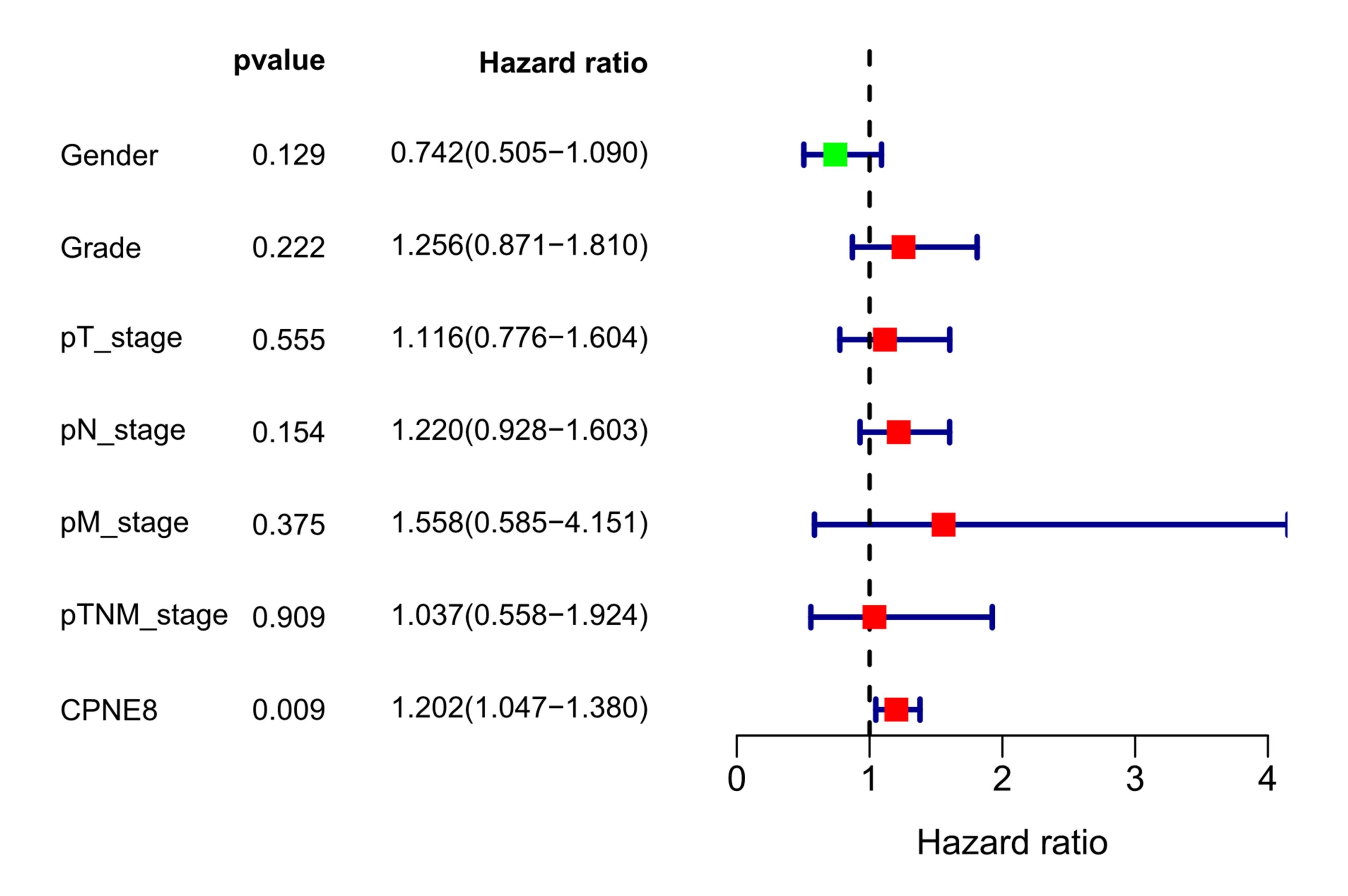
2 **Supplementary Figure S1** (A) The expression of *CPNE8* at different metastatic areas 3 was compared in the TCGA-STAD cohort. (B) CPNE8 showed poorer performance in 4 diagnosing gastric cancer than CEACAM5 in the TCGA-STAD cohort. (C) CPNE8 5 exhibited excellent performance in diagnosing gastric cancer than CEACAM5 in 6 GSE118946 dataset. (D)The expression of CPNE8 showed no difference between 7 male and female GC patients. (E) There was no difference in CPNE8 expression among various T classifications. (F) The expression of CPNE8 did not differ among 8 9 the four N classifications. 10 Supplementary Figure S2 (A) Univariate Cox regression analyses estimating 11 12 prognostic value (OS) of CPNE8 in TCGA-STAD cohort. HR >1.0 indicates 13 overexpression *CPNE8* is an unfavorable prognostic biomarker. (B) Multivariate Cox 14 regression analysis for estimating the predictive value (OS) of CPNE8 in the TCGA-STAD cohort. HR >1.0, p <0.05 indicates that *CPNE8* can serve as an 15 16 independent prognostic risk factor biomarker. Receiver operating characteristic (ROC) 17 curves for risk scores predicting overall survival (C), progression-free survival (D), 18 and disease-free survival (E) at 1/3/5 years in the TCGA-STAD cohort. 19 20 Supplementary Figure S3 (A) The plot showed enrichment of metastasis-related 21 signaling pathways in the high CPNE8 expression group by GSEA analysis in the 22 TCGA-STAD cohort. (B) KEGG functional enrichment analysis revealed a 23 significant abundance of CPNE8 correlated genes in metastasis-related signaling, such 24 as focal adhesion, tight junction, and cell adhesion molecules. (C) The results showed 25 the protein level of FAK after adding the small molecule FAK inhibitor GSK2256098 26 to treat for 2 hours. Relative protein expression (interested protein/GAPDH) was 27 quantified in GC cells. The optimal concentration was selected as 10 µM. (D) The 28 results showed the knockdown efficiency of si-FAK by detecting FAK protein level.

29 Relative protein expression was also quantified by Image J software and GAPDH 30 expression was used as a normalized control. 31 32 Supplementary Figure S4 (A) Cell cycle analysis of BGC823-oe-CPNE8 cells after 33 attenuating FAK by GSK2256098 treatment or knocking down FAK. The bar graph 34 represented the proportion of cells in various cell cycle phases in GC cells. Data are 35 presented as mean ± SD for at least three independent experiments. (B) Analysis of 36 apoptosis in GC cells after GSK2256098 treatment or knockdown of FAK. The 37 proportion of apoptotic cells in GC cells was shown as column graphs. Data are 38 presented as mean \pm SD for at least three independent experiments. 39 40 Supplementary Figure S5 (A) Different expression of ESTIMATE score, Immune score, and Stromal score was calculated based on CPNE8 status in GSE84437 cohort. 41 42 (B) Correlation of CPNE8 expression and the infiltrating of CAFs quantified using the 43 MCP-counter algorithm in the GSE84437 cohort. 44 45 Supplementary Figure S6 (A) Spearman correlation analysis of MSI scores and 46 CPNE8 gene expression was negatively correlated. (B) Spearman correlation analysis 47 of TMB sores and *CPNE8* gene expression was negatively correlated. 48 49

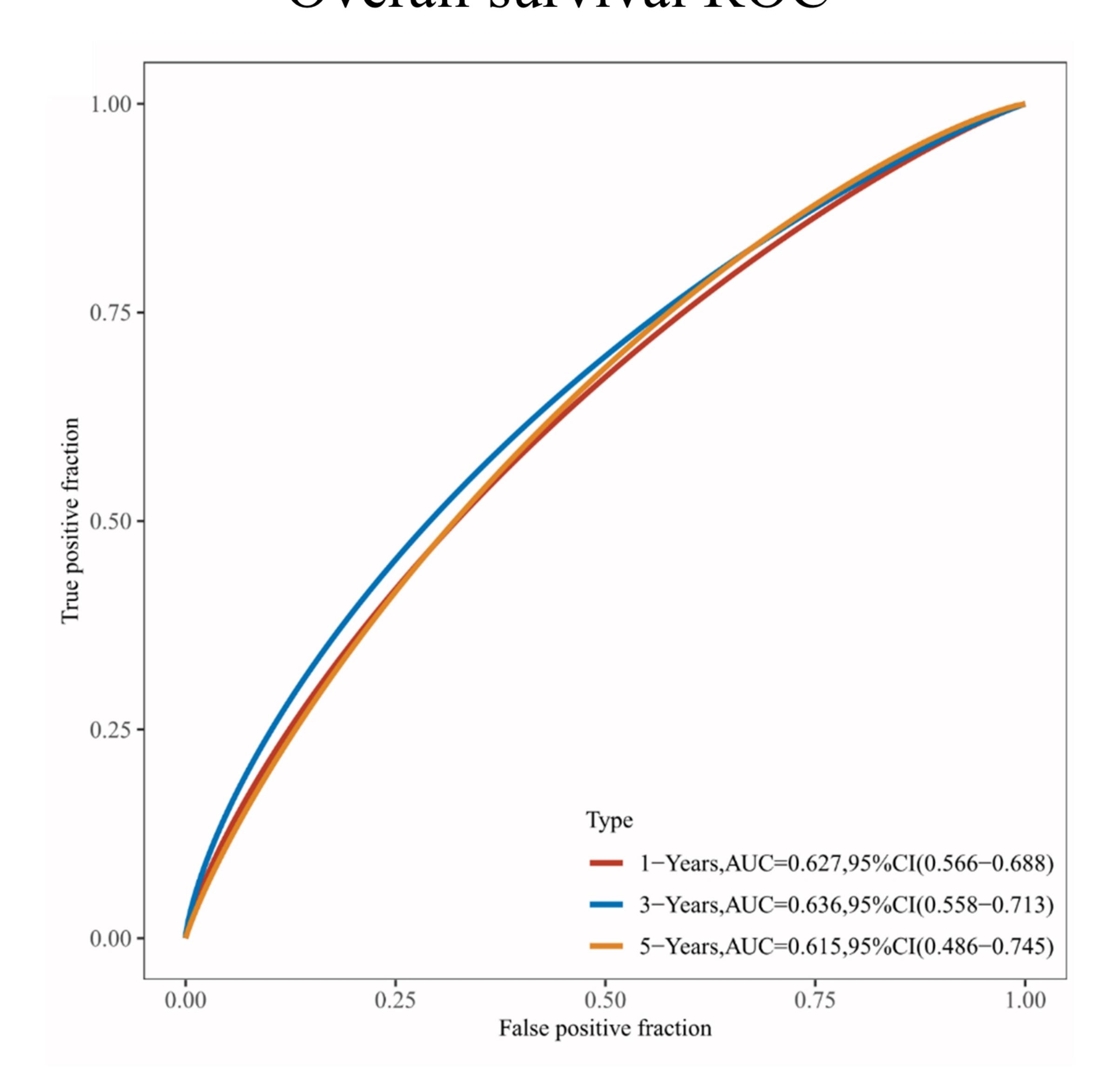


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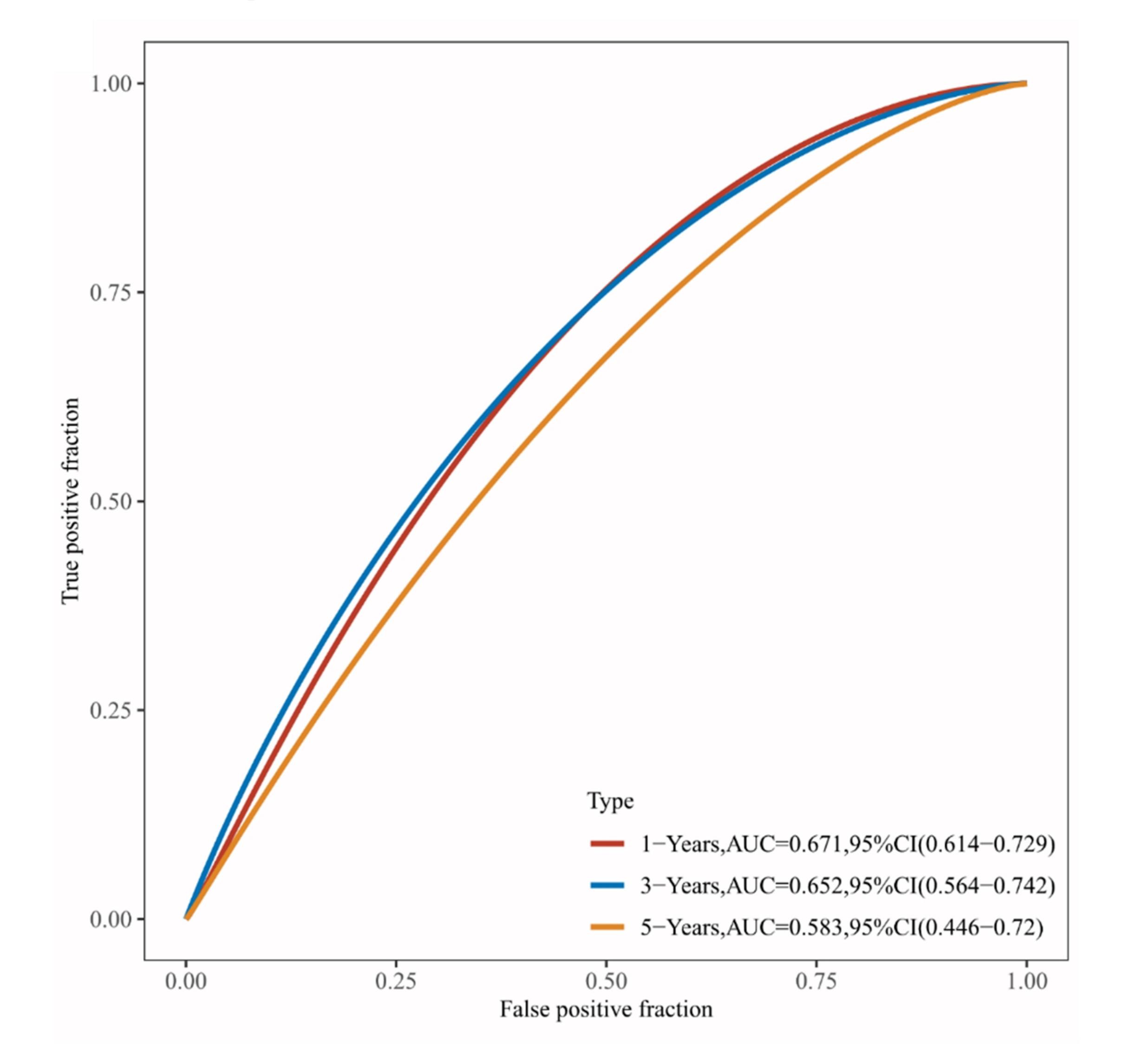




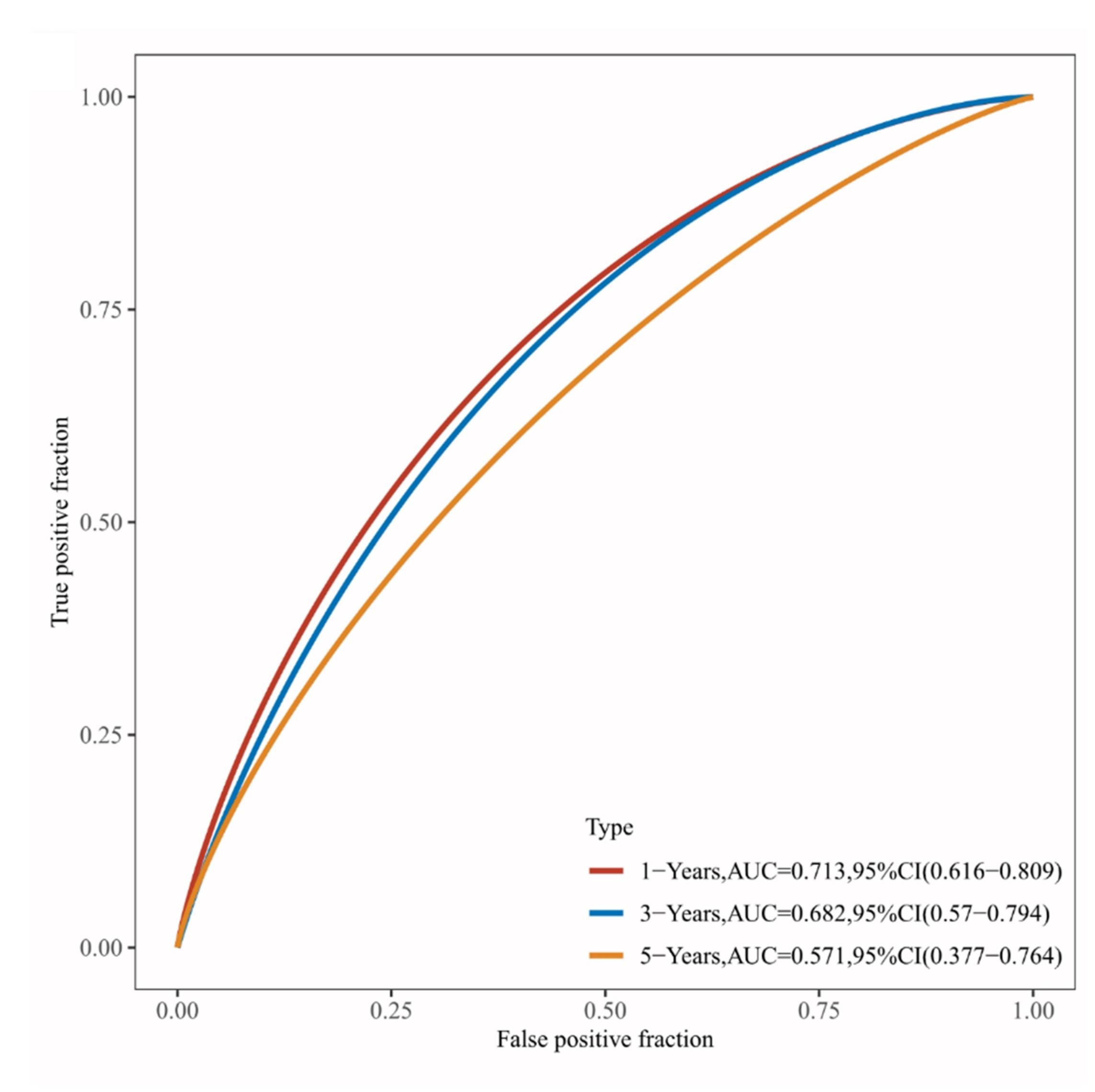
Overall survival ROC

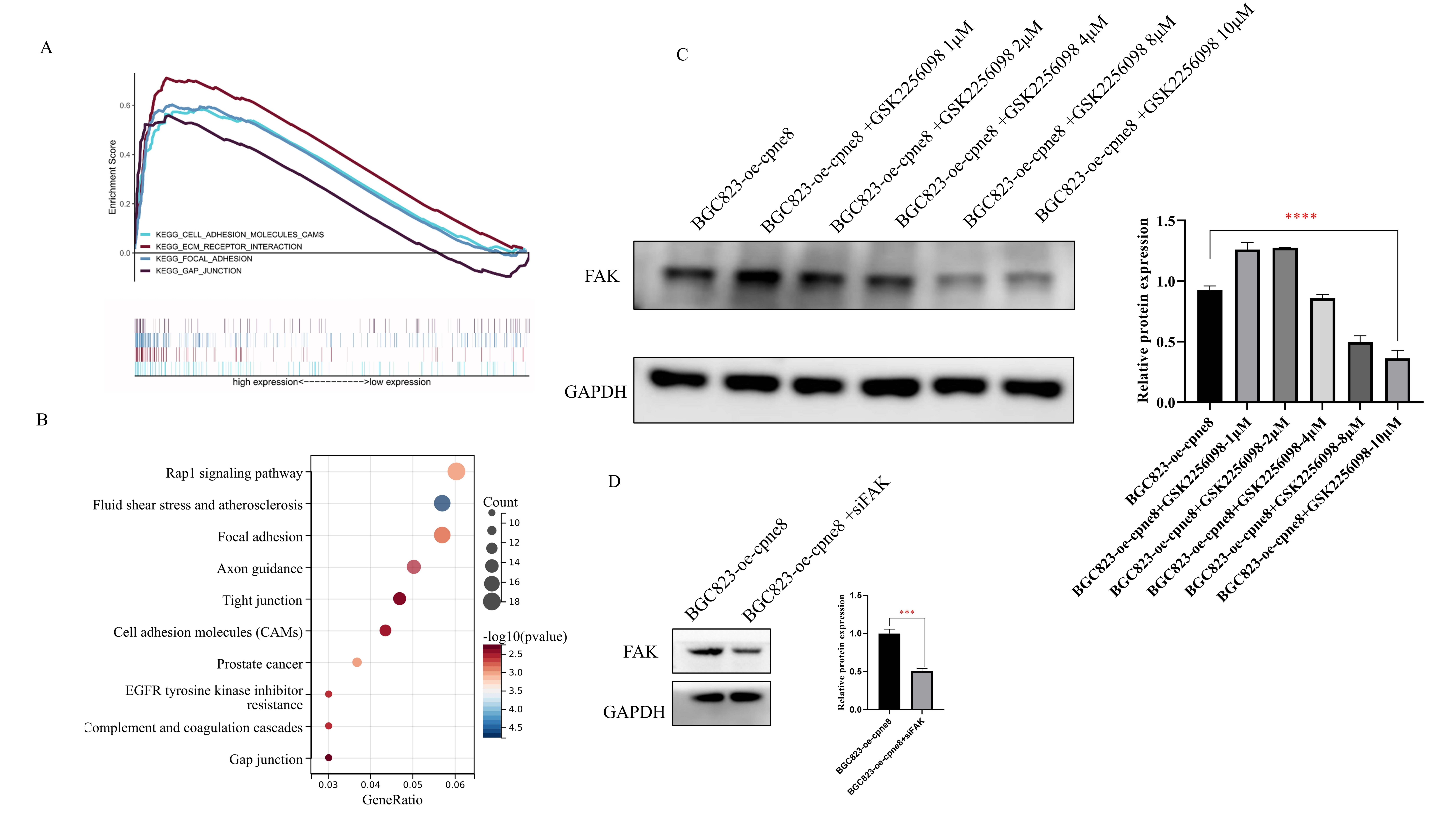


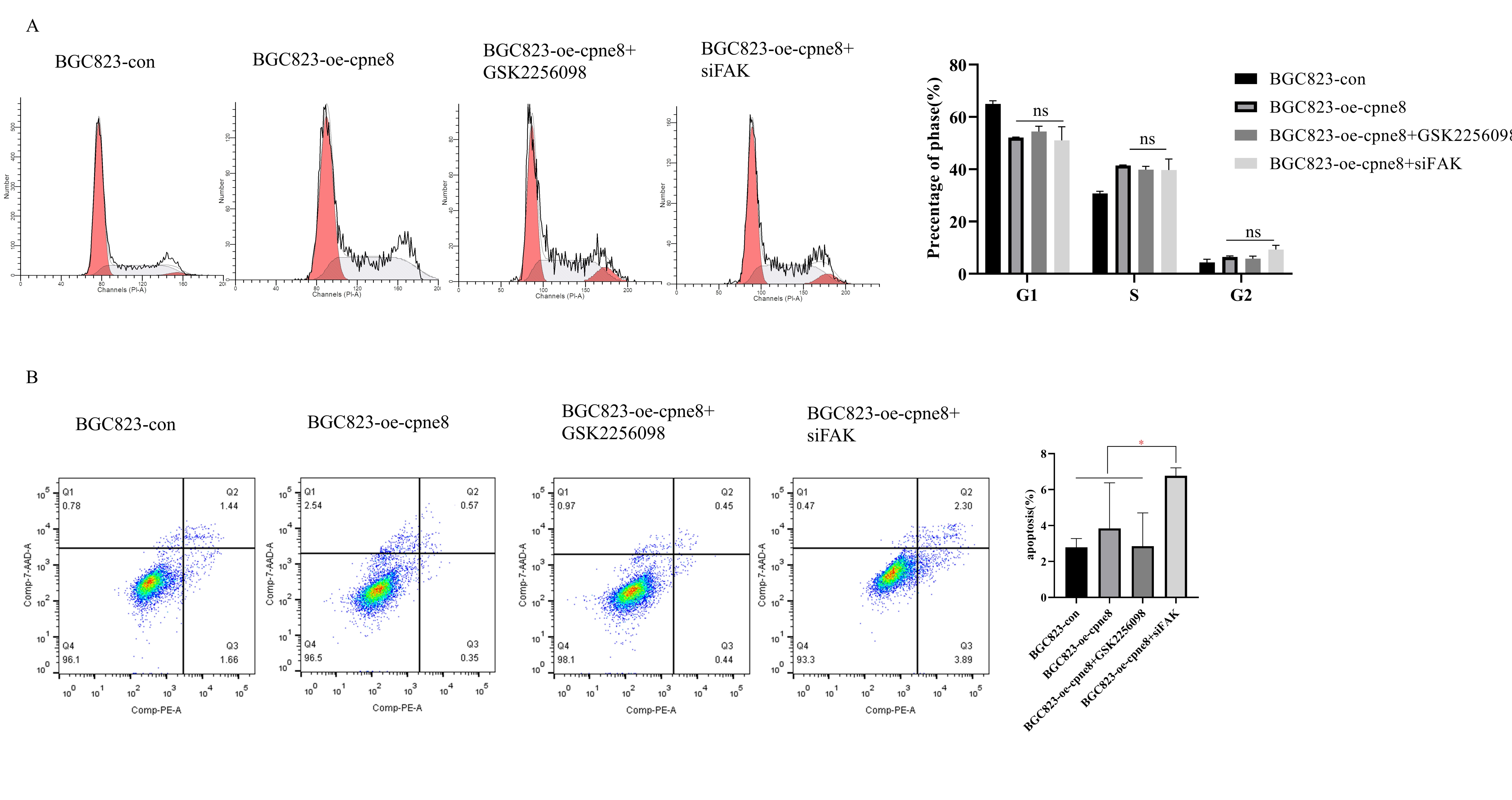
Progression free survival ROC



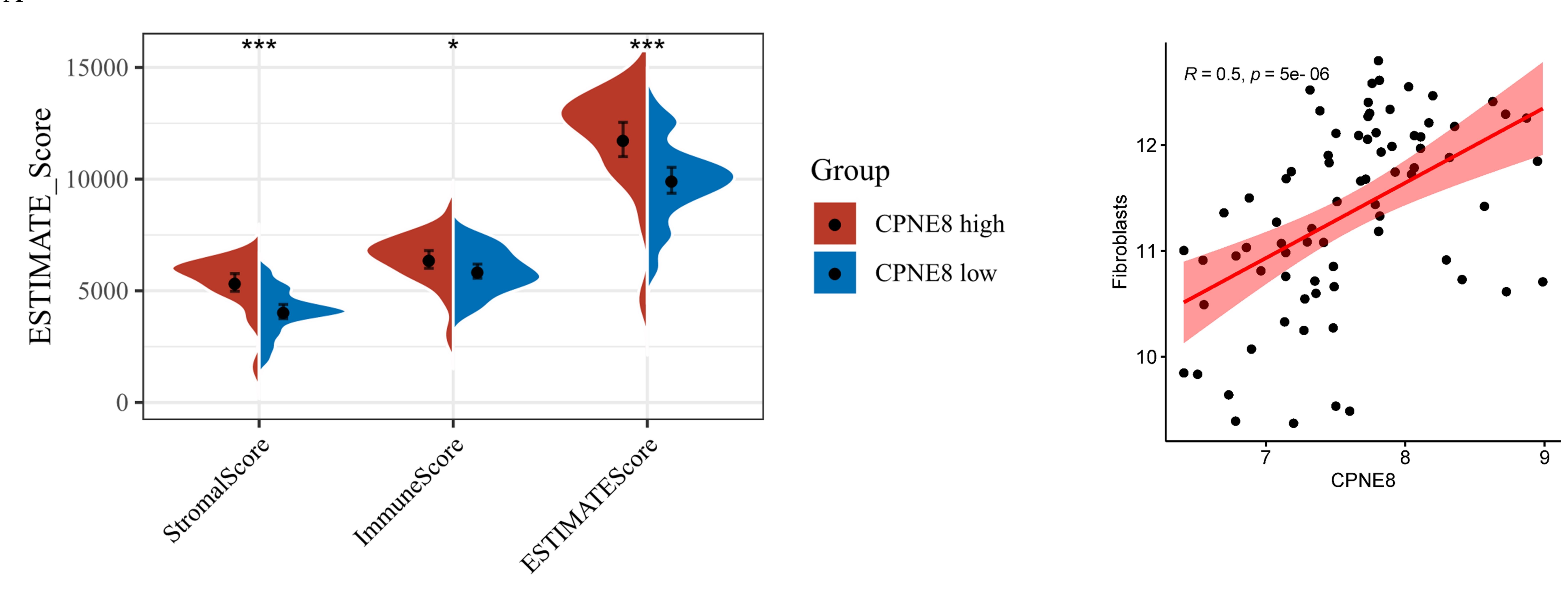
Disease free survival ROC

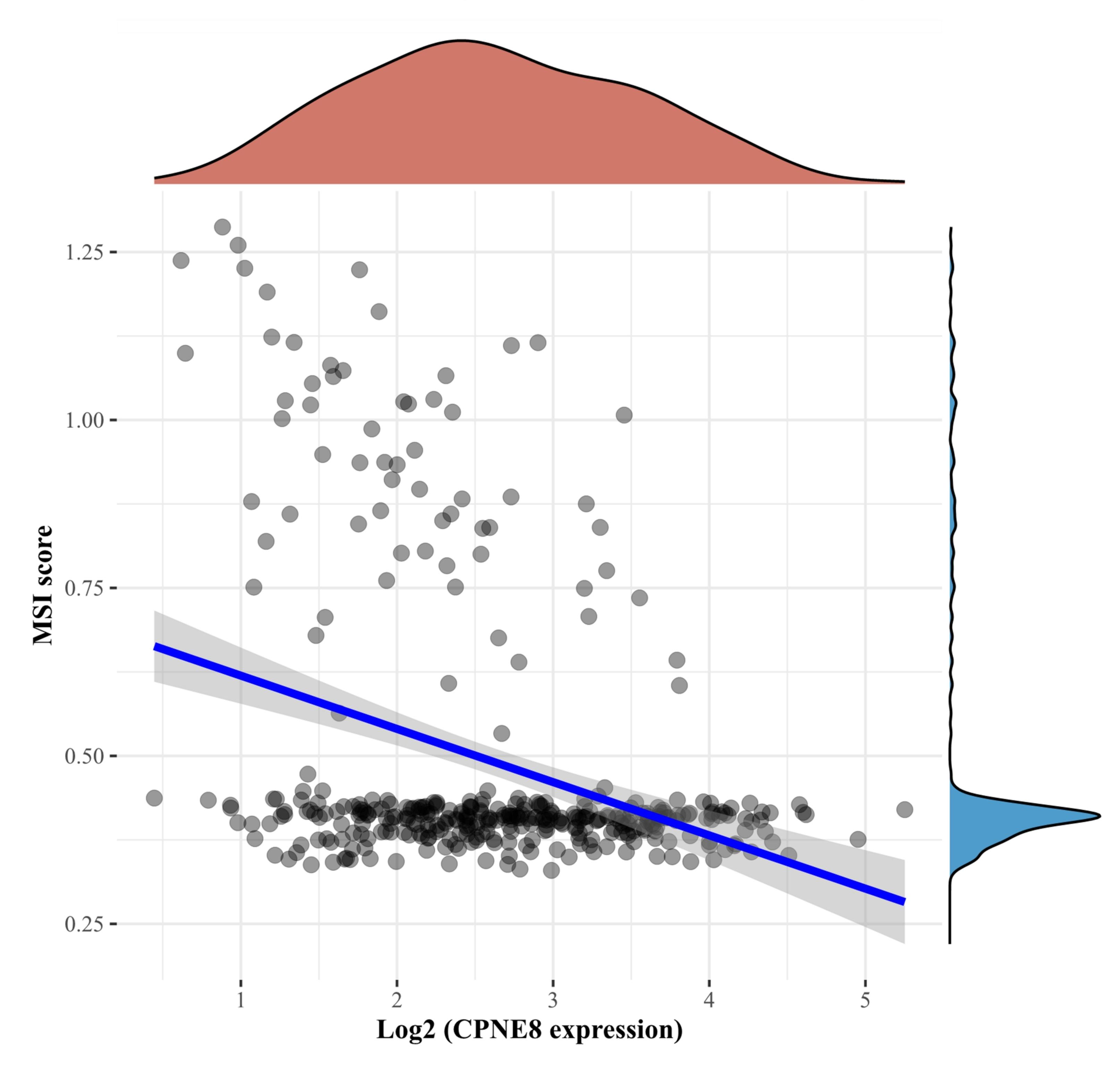


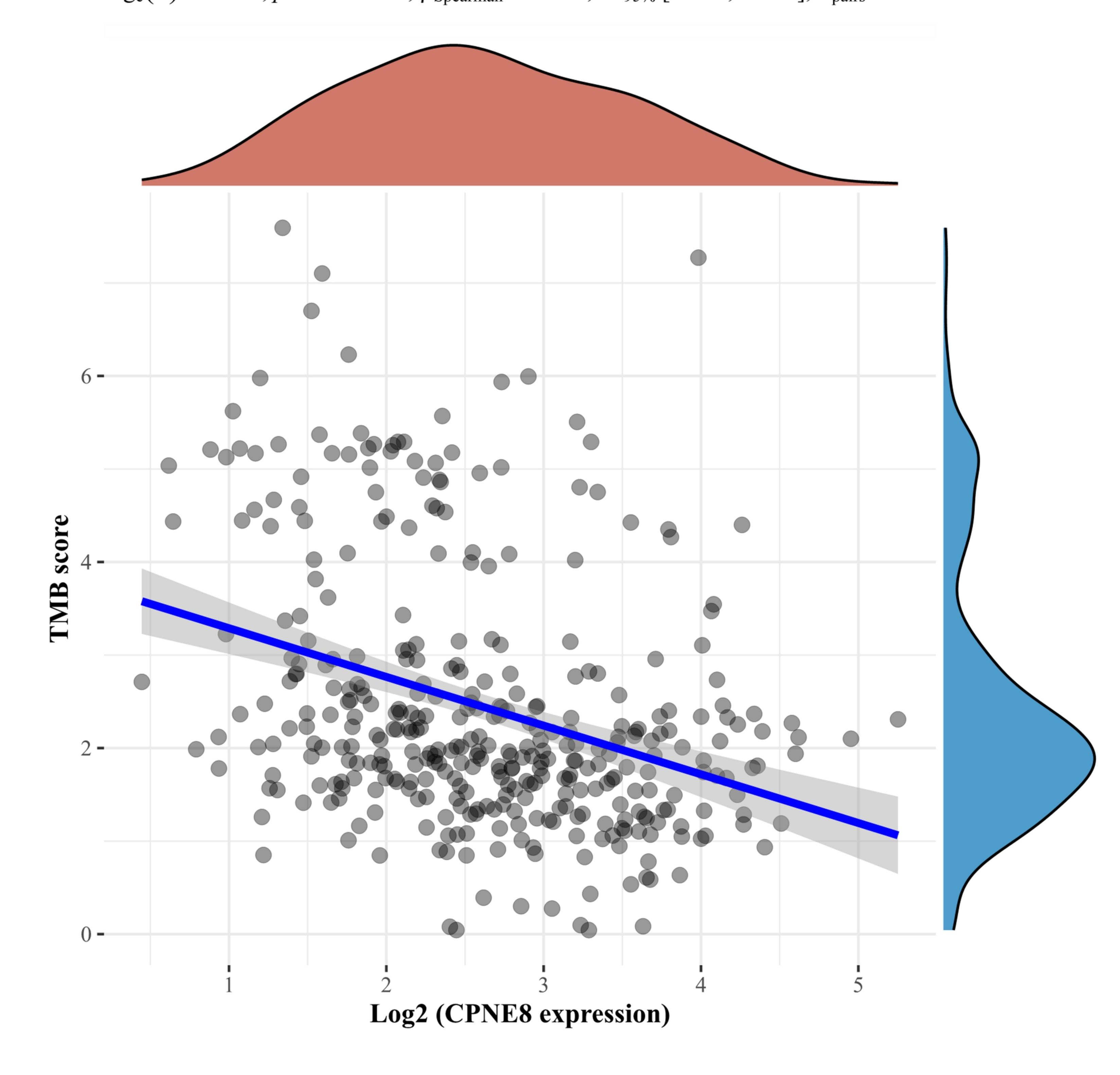












ID gender	grade	stage	T	M	N	Lymph nod: AICC-edition
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TCGA-B7-A5TI-01A-11R-AMALE	G3	Stage III	T4	M0	N3	18 7th
TCGA-BR-4253-01A-01R-1FEMALE	G3	Stage III	T3	M0	N1	3 6th
TCGA-BR-4267-01A-01R-1MALE	G2	Stage I	T2	M0	N0	0 6th
TCGA-BR-4279-01A-01R-1MALE	G3	Stage II	T2	M0	N1	3 6th
TCGA-BR-4280-01A-01R-1FEMALE	G2	Stage III	T2	M0	N1	1 6th
TCGA-BR-4361-01A-01R-1FEMALE TCGA-BR-4368-01A-01R-1FEMALE TCGA-BR-6452-01A-12R-1FEMALE TCGA-BR-6453-01A-11R-1MALE TCGA-BR-6454-01A-11R-1MALE	G3 G3 G3 G3	Stage III Stage IV Stage II Stage II	T4 T4 T3 T2 T3	M0 M0 M0 M0 M0	N0 N2 N0 N1 N0	0 6th 8 6th 0 7th 1 7th 0 7th
TCGA-BR-6455-01A-11R-1MALE	G3	Stage II	T3	M0	N1	2 7th
TCGA-BR-6456-01A-11R-1FEMALE	G2	Stage II	T3	M0	N1	2 7th
TCGA-BR-6457-01A-21R-1MALE	G3	Stage II	T3	M0	N0	0 7th
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TCGA-BR-6563-01A-13R-2MALE	G3	Stage II	T3	M0	N1	1 7th
TCGA-BR-6564-01A-12R-1FEMALE	G3	Stage III	T3	M0	N2	3 7th
TCGA-BR-6565-01A-11R-1MALE	G2	Stage II	T4	M0	N0	0 7th
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TCGA-BR-6802-01A-11R-1MALE	G3	Stage III	T3	M0	N2	3 7th
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TCGA-BR-6852-01A-11R-1FEMALE	G3	Stage II Stage IV Stage II Stage I Stage I	T3	M0	N0	0 7th
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TCGA-BR-7715-01A-11R-2MALE	G2		T3	M0	N0	0 7th
TCGA-BR-7716-01A-21R-2FEMALE TCGA-BR-7717-01A-11R-2MALE TCGA-BR-7722-01A-31R-2MALE TCGA-BR-7723-01A-11R-2MALE TCGA-BR-7851-01A-11R-2MALE	G2 G2 G3 G3 G3	Stage II Stage IV Stage II Stage III Stage III	T3 T4 T3 T3 T3	M0 M0 M0 M0 M0	N1 N1 N1 N3 N0	1 7th 2 6th 5 7th 8 7th 0 7th
TCGA-BR-7831-01A-11R-2MALE TCGA-BR-7901-01A-11R-2MALE TCGA-BR-7958-01A-21R-2MALE TCGA-BR-7959-01A-11R-2MALE TCGA-BR-8058-01A-31R-2FEMALE TCGA-BR-8059-01A-11R-2MALE	G2 G3 G3 G3 G3	Stage II Stage III Stage III Stage III Stage III	T3 T4 T4 T4 T4	M0 M0 M0 M0 M0 M0	N1 N0 N1 N2 N1	2 7th 2 7th 0 7th 1 7th 3 7th 1 7th
TCGA-BR-8060-01A-11R-2FEMALE TCGA-BR-8077-01A-11R-2FEMALE TCGA-BR-8080-01A-11R-2FEMALE TCGA-BR-8081-01A-11R-2FEMALE TCGA-BR-8284-01A-11R-2FEMALE	G3 G2 G3 G2 G3	Stage III Stage III Stage III Stage III Stage III	T2 T4 T4 T4 T4	M0 M0 M0 M0 M0	N2 N1 N3 N0 N3	4 7th 2 7th 10 7th 0 7th 9 7th
TCGA-BR-8286-01A-11R-2TEMALE TCGA-BR-8289-01A-11R-2MALE TCGA-BR-8295-01A-11R-2FEMALE TCGA-BR-8296-01A-11R-2FEMALE TCGA-BR-8361-01A-11R-2FEMALE	G3 G3 G3 G3 G3	Stage III Stage IV Stage II Stage III Stage III	T3 T4 T4 T4 T4	M0 M1 M0 M0 M0	N0 N3 N0 N2 N2	9 7th 0 7th 11 7th 0 7th 6 7th 6 7th
TCGA-BR-8364-01A-11R-2FEMALE	G3	Stage III Stage II Stage II Stage III Stage III	T4	M0	N2	3 7th
TCGA-BR-8365-01A-21R-2FEMALE	G3		T3	M0	N0	0 7th
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TCGA-BR-8371-01A-11R-2MALE	G3		T3	M0	N3	10 7th
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TCGA-CG-5724-01A-11R- MALE	G3	Stage IV	T3	M1	N3	34 5th
TCGA-CG-5725-01A-11R- MALE	G3	Stage I	T2	M0	N0	0 5th
TCGA-CG-5726-01A-11R-MALE TCGA-CG-5732-01A-11R-MALE TCGA-CG-5734-01A-11R-MALE TCGA-D7-5577-01A-01R-1FEMALE TCGA-D7-5578-01A-01R-1MALE	G2 G2 G3 G2 G3	Stage I Stage IV Stage III Stage III	T1 T2 T3 T2 T3	M0 M0 M0 M0 M0	N0 N3 N1 N3 N2	0 5th 17 5th 4 5th 19 7th 6 7th
TCGA-D7-6520-01A-11R-: MALE TCGA-D7-6522-01A-11R-: MALE TCGA-D7-6524-01A-11R-: MALE TCGA-D7-6525-01A-11R-: MALE TCGA-D7-6526-01A-11R-: FEMALE	G3 G3 G3 G3 G2	Stage III Stage I Stage III Stage III	T2 T2 T2 T2 T3	M0 M0 M0 M0 M0	N2 N0 N1 N2 N2	14 6th 0 6th 6 6th 6 6th 3 7th
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TCGA-D7-6822-01A-11R-: MALE	G2	Stage I	T2	M0	N0	0 7th
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TCGA-D7-A4Z0-01A-22R-FEMALE	G3	Stage II	T2	M0	N2	3 7th
TCGA-D7-A6EV-01A-11R-FEMALE	G3	Stage II	T2	M0	N2	3 7th
TCGA-D7-A6EX-01A-11R-FEMALE	G3	Stage III	T3	M0	N2	4 7th
TCGA-D7-A6EY-01A-21R-FEMALE	G3	Stage III	T3	M0	N3	13 7th
TCGA-D7-A6EZ-01A-11R-MALE	G3	Stage III	T3	M0	N2	3 7th
TCGA-D7-A6F0-01A-11R-, FEMALE TCGA-D7-A6F2-01A-12R-, MALE TCGA-D7-A747-01A-22R-, MALE TCGA-D7-A748-01A-12R-, FEMALE TCGA-D7-A74A-01A-11R- FEMALE	G3 G3 G3 G3 G2	Stage I Stage I Stage II Stage IV	T2 T2 T3 T4 T3	M0 M0 M0 M1 M0	N0 N0 N1 N3 N2	0 7th 0 7th 0 7th 12 7th 4 7th
TCGA-F1-6874-01A-11R-1MALE TCGA-F1-6875-01A-11R-2MALE TCGA-F1-A448-01A-11R-/MALE TCGA-F1-A72C-01A-21R-/MALE TCGA-FP-7829-01A-11R-2MALE	G3 G2 G3 G2 G2	Stage I Stage II Stage II Stage II	T2 T2 T3 T3 T3	M0 M0 M0 M0 M0	N0 N0 N3 N0 N1	0 7th 0 4th 18 7th 0 7th 2 7th
TCGA-FP-8209-01A-11R-2MALE TCGA-FP-8210-01A-11R-2MALE TCGA-FP-A4BF-01A-12R-/MALE TCGA-HF-7132-01A-11R-/MALE TCGA-HF-7133-01A-11R-/FEMALE TCGA-HF-7134-01A-11R-/MALE	G3 G3 G3 G2 G2 G2	Stage I Stage III Stage III Stage IV Stage I	T2 T3 T3 T2 T2 T1	M0 M0 M0 M0 M0 M0	N0 N1 N2 N1 N3 N0	0 6th 3 6th 5 7th 2 6th 16 6th 0 6th
TCGA-HI-7134-01A-11R-7MALE TCGA-HU-8244-01A-11R-FEMALE TCGA-HU-8249-01A-11R-MALE TCGA-HU-8602-01A-11R-FEMALE TCGA-HU-8604-01A-11R-FEMALE	G3 G1 G2 G3 G2	Stage III Stage II Stage III Stage III Stage II	T4 T1 T3 T4 T3	M0 M0 M0 M0 M0	N3 N0 N2 N0 N0	11 7th 0 7th 5 7th 0 7th 0 7th
TCGA-HU-8608-01A-11R- MALE TCGA-HU-8610-01A-22R- MALE TCGA-HU-A4G2-01A-11R- MALE TCGA-HU-A4G3-01A-11R- MALE TCGA-HU-A4G8-01A-11R- FEMALE	G3 G2 G3 G2 G3	Stage III Stage I Stage II Stage II Stage II Stage II	T4 T1 T3 T2 T3	M0 M0 M0 M0 M0	N2 N0 N1 N2 N1	4 7th 4 7th 0 7th 2 7th 5 7th 1 7th
TCGA-HU-A4G9-01A-11R-FEMALE	G2	Stage II	T1	M0	N0	0 7th
TCGA-HU-A4GC-01A-12R-MALE	G3	Stage III	T4	M0	N2	3 7th
TCGA-HU-A4GD-01A-11R-MALE	G3	Stage II	T3	M0	N1	1 7th
TCGA-HU-A4GF-01A-11R-MALE	G2	Stage II	T3	M0	N0	0 7th
TCGA-HU-A4GH-01A-11R MALE	G2	Stage I	T1	M0	N0	0 7th
TCGA-HU-A4GJ-01A-11R-FEMALE	G3	Stage III	T4	M0	N3	14 7th
TCGA-HU-A4GP-01A-11R-FEMALE	G2	Stage II	T2	M0	N1	2 7th
TCGA-HU-A4GQ-01A-11R MALE	G2	Stage III	T4	M0	N2	4 7th
TCGA-HU-A4GT-01A-21R-FEMALE	G3	Stage II	T3	M0	N0	0 7th
TCGA-HU-A4GU-01A-11R-MALE	G3	Stage II	T3	M0	N1	2 7th
TCGA-HU-A4GX-01A-12R-FEMALE	G3	Stage III	T4	M0	N2	6 7th
TCGA-HU-A4GY-01A-21R-FEMALE	G3	Stage III	T4	M0	N1	1 7th
TCGA-HU-A4H0-01A-11R-MALE	G3	Stage III	T4	M0	N3	49 7th
TCGA-HU-A4H2-01A-11R-FEMALE	G2	Stage III	T3	M0	N3	34 7th
TCGA-HU-A4H3-01A-21R-FEMALE	G3	Stage III	T4	M0	N3	16 7th
TCGA-HU-A4H4-01A-21R-FEMALE TCGA-HU-A4H6-01A-11R-FEMALE TCGA-HU-A4H8-01A-11R-MALE TCGA-HU-A4HB-01A-12R-MALE TCGA-HU-A4HD-01A-11R MALE	G3 G2 G2 G3 G2	Stage II Stage III Stage I Stage III	T2 T3 T1 T2 T3	M0 M0 M0 M0 M0	N2 N2 N1 N2 N2	4 7th 3 7th 1 7th 5 7th 3 7th
TCGA-IN-7806-01A-11R-2 MALE TCGA-IN-8462-01A-11R-2 MALE TCGA-IN-8663-01A-11R-2 MALE TCGA-IN-A6RI-01A-11R-A MALE TCGA-IN-A6RJ-01A-21R-A MALE TCGA-IN-A6RN-01A-12R-FEMALE	G3 G2 G3 G2 G3 G2	Stage II Stage II Stage II Stage I Stage I	T3 T2 T2 T1 T1 T1	M0 M0 M0 M0 M0 M0	N1 N1 N2 N0 N0 N2	2 7th 2 7th 9 7th 0 7th 0 7th 9 7th
TCGA-IN-A6RN-01A-12R-, FEMALE TCGA-IN-A6RS-01A-12R-, MALE TCGA-IN-A7NR-01A-11R-, FEMALE TCGA-IN-A7NT-01A-21R-, FEMALE TCGA-IN-A7NU-01A-22R- MALE	G2 G2 G3 G3 G3	Stage II Stage I Stage I Stage IV Stage II Stage III	T1 T1 T3 T3 T3	M0 M0 M1 M0 M0	N2 N0 N0 N3 N1 N3	9 7th 0 7th 0 7th 9 7th 1 7th 12 7th
TCGA-IN-AB1V-01A-21R-/MALE TCGA-IN-AB1X-01A-11R-/FEMALE TCGA-KB-A6F7-01A-12R-/FEMALE TCGA-KB-A93G-01A-11R-MALE TCGA-KB-A93H-01A-11R-FEMALE	G2 G3 G3 G1 G1	Stage II Stage II Stage I Stage I Stage II	T1 T3 T1 T2 T3	M0 M0 M0 M0 M0	N0 N0 N1 N0 N1	0 7th 0 7th 0 7th 1 6th 0 7th 1 7th
TCGA-KB-A33I-01A-11R-/ MALE TCGA-MX-A5UG-01A-21R MALE TCGA-MX-A5UJ-01A-11R-FEMALE TCGA-MX-A663-01A-11R- MALE TCGA-R5-A7O7-01A-11R- MALE	G3 G3 G3 G3 G2	Stage II Stage III Stage III Stage III Stage II	T2 T3 T3 T3 T3	M0 M0 M0 M0 M0 M1	N1 N1 N2 N0 N1	1 6th 2 6th 6 7th 0 7th 0 7th
TCGA-R5-A7ZE-01A-11R-MALE TCGA-R5-A7ZE-01B-11R-/FEMALE TCGA-R5-A7ZF-01A-11R-/FEMALE TCGA-R5-A7ZI-01A-11R-/MALE TCGA-R5-A805-01A-11R-/MALE TCGA-RD-A7BS-01A-11R- MALE	G2 G2 G3 G3 G3	Stage IV Stage IV Stage IV Stage III Stage III	T3 T4 T4 T3 T3	M0 M1 M1 M0 M0	N2 N1 N1 N2 N1	0 7th 0 7th 0 7th 0 6th 0 6th 5 6th
TCGA-RD-A7BT-01A-11R- MALE	G3	Stage IV	T3	M0	N3	55 6th
TCGA-RD-A7BW-01A-11R FEMALE	G3	Stage I	T2	M0	N0	0 6th
TCGA-RD-A7C1-01A-11R- MALE	G3	Stage I	T2	M0	N0	0 6th
TCGA-RD-A8MV-01A-11R MALE	G3	Stage III	T3	M0	N2	9 6th
TCGA-RD-A8MW-01A-11F MALE	G3	Stage III	T3	M0	N2	11 6th
TCGA-RD-A8N0-01A-12R-FEMALE	G3	Stage III	T3	M0	N2	10 6th
TCGA-RD-A8N1-01A-12R-MALE	G3	Stage III	T3	M0	N2	10 6th
TCGA-RD-A8N2-01A-12R-FEMALE	G3	Stage I	T2	M0	N0	0 6th
TCGA-RD-A8N4-01A-21R-FEMALE	G3	Stage III	T3	M0	N1	3 6th
TCGA-RD-A8N5-01A-12R-MALE	G2	Stage III	T3	M0	N1	4 6th
TCGA-RD-A8N6-01A-11R-FEMALE	G3	Stage III	T2	M0	N2	10 6th
TCGA-RD-A8N9-01A-12R-FEMALE	G3	Stage III	T2	M0	N1	2 6th
TCGA-RD-A8NB-01A-12R-FEMALE	G3	Stage III	T3	M0	N1	3 6th
TCGA-SW-A7EB-01A-11R-MALE	G2	Stage III	T3	M0	N2	3 7th
TCGA-VQ-A8DT-01A-11R-MALE	G3	Stage III	T3	M0	N3	9 7th
TCGA-VQ-A8DU-01A-11R MALE	G2	Stage III	T3	M0	N2	8 7th
TCGA-VQ-A8DV-01A-12R·MALE	G2	Stage I	T2	M0	N0	0 6th
TCGA-VQ-A8DZ-01A-11R·MALE	G3	Stage IV	T4	M1	N3	18 7th
TCGA-VQ-A8E0-01A-11R-MALE	G3	Stage III	T3	M0	N2	6 7th
TCGA-VQ-A8E2-01A-11R-MALE	G2	Stage III	T3	M0	N2	8 6th
TCGA-VQ-A8E3-01A-11R- MALE	G3	Stage II	T3	M0	N0	0 7th
TCGA-VQ-A8E7-01B-11R- MALE	G2	Stage IV	T3	M1	N1	1 7th
TCGA-VQ-A8P2-01A-11R- MALE	G2	Stage III	T4	M0	N1	1 7th
TCGA-VQ-A8P3-01A-11R- MALE	G2	Stage III	T4	M0	N1	1 7th
TCGA-VQ-A8P5-01A-11R- MALE	G3	Stage II	T3	M0	N0	0 7th
TCGA-VQ-A8P8-01A-11R-FEMALE	G2	Stage II	T4	M0	N0	0 7th
TCGA-VQ-A8PB-01A-11R-FEMALE	G2	Stage II	T3	M0	N0	0 6th
TCGA-VQ-A8PC-01A-11R-MALE	G3	Stage III	T3	M0	N1	2 6th
TCGA-VQ-A8PD-01A-11R-MALE	G2	Stage III	T4	M0	N3	26 7th
TCGA-VQ-A8PE-01A-11R-MALE	G3	Stage III	T3	M0	N3	12 7th
TCGA-VQ-A8PF-01A-11R-MALE	G3	Stage III	T3	M0	N3	24 7th
TCGA-VQ-A8PH-01A-12R-MALE	G2	Stage III	T3	M0	N3	24 7th
TCGA-VQ-A8PK-01A-12R-MALE	G2	Stage III	T3	M0	N3	11 7th
TCGA-VQ-A8PM-01A-21R MALE	G3	Stage IV	T4	M0	N3	55 6th
TCGA-VQ-A8PO-01A-11R-MALE	G3	Stage II	T4	M0	N0	0 7th
TCGA-VQ-A8PP-01A-21R-MALE	G2	Stage IV	T4	M0	N1	3 6th
TCGA-VQ-A8PQ-01A-11R-FEMALE	G2	Stage IV	T4	M1	N1	6 6th
TCGA-VQ-A8PU-01A-12R-FEMALE	G3	Stage III	T4	M0	N1	1 7th
TCGA-VQ-A8PX-01A-12R-MALE	G2	Stage I	T1	M0	N0	0 6th
TCGA-VQ-A91A-01A-11R-MALE	G1	Stage III	T3	M0	N3	11 7th
TCGA-VQ-A91D-01A-11R-MALE	G2	Stage III	T4	M0	N2	5 7th
TCGA-VQ-A91E-01A-31R-FEMALE	G3	Stage III	T4	M0	N0	0 7th
TCGA-VQ-A91K-01A-11R-MALE	G2	Stage III	T3	M0	N1	4 6th
TCGA-VQ-A91N-01A-11R-FEMALE	G2	Stage IV	T4	M0	N3	18 6th
TCGA-VQ-A91Q-01A-12R-MALE	G3	Stage IV	T3	M0	N3	25 6th
TCGA-VQ-A91U-01A-11R-MALE TCGA-VQ-A91V-01A-11R-MALE TCGA-VQ-A91X-01A-12R-MALE TCGA-VQ-A91Y-01A-11R-MALE TCGA-VQ-A91Z-01A-11R-FEMALE	G2 G2 G3 G3 G2	Stage III Stage III Stage III Stage III	T3 T3 T3 T4 T3	M0 M0 M0 M0 M0	N1 N2 N2 N3 N1	2 6th 4 7th 14 6th 50 6th 2 6th
TCGA-VQ-A922-01A-11R-MALE	G2	Stage IV Stage III Stage III Stage III Stage III	T4	M0	N1	1 6th
TCGA-VQ-A923-01A-11R-MALE	G3		T3	M0	N1	4 6th
TCGA-VQ-A924-01A-11R-MALE	G2		T3	M0	N0	0 6th
TCGA-VQ-A925-01A-11R-MALE	G2		T3	M0	N2	6 7th
TCGA-VQ-A927-01A-12R-MALE	G1		T3	M0	N3	27 7th
TCGA-VQ-A928-01A-11R-MALE	G2	Stage IV Stage II Stage III Stage III Stage III Stage III	T3	M0	N3	32 6th
TCGA-VQ-A92D-01A-11R-MALE	G2		T2	M0	N0	0 6th
TCGA-VQ-A94O-01A-11R-MALE	G2		T4	M0	N3	18 7th
TCGA-VQ-A94T-01A-11R-MALE	G3		T3	M0	N2	9 6th
TCGA-VQ-A94U-01A-12R-MALE	G3		T4	M0	N0	0 7th
TCGA-VO-AA64-01A-11R-MALE	G2		T3	M0	N2	6 7th
TCGA-VQ-AA64-01A-11R-MALE	G2	Stage III Stage III Stage III Stage III Stage III Stage III	T3	M0	N2	6 7th
TCGA-VQ-AA68-01A-11R-FEMALE	G2		T4	M0	N3	21 7th
TCGA-VQ-AA69-01A-11R-MALE	G2		T3	M0	N2	6 7th
TCGA-VQ-AA6A-01A-11R-MALE	G2		T4	M0	N3	8 7th
TCGA-VQ-AA6D-01A-11R-FEMALE	G2		T4	M0	N1	2 7th
TCGA-VQ-AA6F-01A-31R-MALE	G2		T3	M0	N1	1 7th
TCGA-VQ-AA6F-01A-31R-MALE	G2	Stage II	T3	M0	N1	1 7th
TCGA-VQ-AA6G-01A-11R-MALE	G2	Stage II	T3	M0	N0	0 7th
TCGA-VQ-AA6J-01A-11R- MALE	G3	Stage III	T4	M0	N2	3 7th
TCGA-VQ-AA6K-01A-11R-MALE	G3	Stage III	T4	M0	N3	10 6th

ID gender TCGA-B7-5818-01A-11R-16 MALE TCGA-B7-A5TI-01A-11R-A3 MALE TCGA-BR-4253-01A-01R-11 FEMALE	grade Stage G3 Stage I G3 Stage III G3 Stage III	T T2 T4	M M0 M0 M0	N N0 N3 N2	corrected 7th 7th 7th
TCGA-BR-4233-01A-01R-11TEMALE TCGA-BR-4267-01A-01R-11 MALE TCGA-BR-4280-01A-01R-11 FEMALE TCGA-BR-4361-01A-01R-11 FEMALE TCGA-BR-4368-01A-01R-11 FEMALE TCGA-BR-6452-01A-12R-18 FEMALE	G3 Stage III G2 Stage I G3 Stage II G2 Stage II G3 Stage III G3 Stage III G3 Stage III G3 Stage III	T3 T2 T2 T3 T4 T4 T3	M0 M0 M0 M0 M0 M0	N0 N2 N1 N0 N3 N0	7th 7th 7th 7th 7th 7th
TCGA-BR-6453-01A-11R-18 MALE TCGA-BR-6454-01A-11R-18 MALE TCGA-BR-6455-01A-11R-18 MALE TCGA-BR-6456-01A-11R-18 FEMALE TCGA-BR-6457-01A-21R-18 MALE TCGA-BR-6458-01A-11R-18 FEMALE	G3 Stage II G3 Stage II G3 Stage II G2 Stage II G3 Stage II G3 Stage II	T2 T3 T3 T3 T3 T3	M0 M0 M0 M0 M0 M0	N1 N0 N1 N1 N0 N1	7th 7th 7th 7th 7th 7th
TCGA-BR-6563-01A-13R-20 MALE TCGA-BR-6564-01A-12R-18 FEMALE TCGA-BR-6565-01A-11R-18 MALE TCGA-BR-6566-01A-11R-18 FEMALE TCGA-BR-6705-01A-12R-18 FEMALE TCGA-BR-6707-01A-11R-18 MALE	G3 Stage II G3 Stage III G2 Stage II G3 Stage II G3 Stage III G3 Stage III G3 Stage II	T3 T3 T4 T3 T3 T3	M0 M0 M0 M0 M0 M0	N1 N2 N0 N0 N3 N0	7th 7th 7th 7th 7th 7th
TCGA-BR-6709-01A-11R-18 FEMALE TCGA-BR-6710-01A-11R-18 MALE TCGA-BR-6801-01A-11R-18 MALE TCGA-BR-6802-01A-11R-18 MALE TCGA-BR-6803-01A-11R-18 FEMALE TCGA-BR-6852-01A-11R-18 FEMALE	G3 Stage III G2 Stage I G2 Stage II G3 Stage III G3 Stage III G3 Stage II G3 Stage II	T3 T2 T3 T3 T3 T3	M0 M0 M0 M0 M0 M0	N3 N0 N0 N2 N0 N0	7th 7th 7th 7th 7th 7th
TCGA-BR-7196-01A-11R-20 MALE TCGA-BR-7704-01A-11R-20 FEMALE TCGA-BR-7707-01A-11R-20 FEMALE TCGA-BR-7715-01A-11R-20 MALE TCGA-BR-7716-01A-21R-20 FEMALE TCGA-BR-7717-01A-11R-20 MALE	G3 Stage IV G3 Stage II G3 Stage I G2 Stage II G2 Stage II G2 Stage II G2 Stage III	T3 T3 T2 T3 T3 T4	M1 M0 M0 M0 M0 M0	N3 N0 N0 N0 N1 N1	7th 7th 7th 7th 7th 7th
TCGA-BR-7722-01A-31R-22 MALE TCGA-BR-7723-01A-11R-20 MALE TCGA-BR-7851-01A-11R-22 MALE TCGA-BR-7901-01A-11R-22 MALE TCGA-BR-7958-01A-21R-23 MALE TCGA-BR-7959-01A-11R-23 MALE	G3 Stage II G3 Stage III G3 Stage II G2 Stage II G3 Stage III G3 Stage III	T3 T3 T4 T3 T4 T4	M0 M0 M0 M0 M0 M0	N1 N3 N0 N1 N0 N1	7th 7th 7th 7th 7th 7th
TCGA-BR-8058-01A-31R-23 FEMALE TCGA-BR-8059-01A-11R-23 MALE TCGA-BR-8060-01A-11R-23 FEMALE TCGA-BR-8077-01A-11R-23 FEMALE TCGA-BR-8080-01A-11R-23 FEMALE TCGA-BR-8081-01A-11R-23 FEMALE	G3 Stage III G3 Stage III G3 Stage II G2 Stage III G3 Stage III G3 Stage III G2 Stage II	T4 T4 T2 T4 T4 T4	M0 M0 M0 M0 M0 M0	N2 N1 N2 N1 N3 N0	7th 7th 7th 7th 7th 7th
TCGA-BR-8284-01A-11R-23 FEMALE TCGA-BR-8286-01A-12R-23 MALE TCGA-BR-8289-01A-11R-23 MALE TCGA-BR-8295-01A-11R-23 FEMALE TCGA-BR-8296-01A-11R-23 FEMALE TCGA-BR-8361-01A-11R-23 FEMALE	G3 Stage III G3 Stage IV G3 Stage IV G3 Stage II G3 Stage III G3 Stage III	T4 T3 T4 T4 T4 T4	M0 M0 M1 M0 M0 M0	N3 N0 N3 N0 N2 N2	7th 7th 7th 7th 7th 7th
TCGA-BR-8364-01A-11R-23 FEMALE TCGA-BR-8365-01A-21R-23 FEMALE TCGA-BR-8366-01A-11R-23 FEMALE TCGA-BR-8367-01A-11R-23 MALE TCGA-BR-8368-01A-11R-23 FEMALE TCGA-BR-8369-01A-11R-23 FEMALE	G3 Stage III G3 Stage II G3 Stage II G3 Stage III G3 Stage III G3 Stage I G3 Stage III	T4 T3 T3 T3 T2 T3	M0 M0 M0 M0 M0 M0	N2 N0 N0 N3 N0 N3	7th 7th 7th 7th 7th 7th
TCGA-BR-8371-01A-11R-23 MALE TCGA-BR-8372-01A-11R-23 MALE TCGA-BR-8373-01A-11R-23 FEMALE TCGA-BR-8380-01A-11R-23 MALE TCGA-BR-8381-01A-11R-24 MALE TCGA-BR-8382-01A-11R-24 FEMALE	G3 Stage III G3 Stage III G2 Stage III G3 Stage III G3 Stage III G3 Stage III G3 Stage III	T3 T4 T4 T4 T3 T4	M0 M0 M0 M0 M0 M0	N3 N3 N1 N3 N1 N3	7th 7th 7th 7th 7th 7th
TCGA-BR-8384-01A-21R-24 MALE TCGA-BR-8483-01A-31R-24 MALE TCGA-BR-8484-01A-11R-24 MALE TCGA-BR-8485-01A-11R-24 FEMALE TCGA-BR-8486-01A-31R-24 FEMALE TCGA-BR-8487-01A-11R-24 FEMALE	G3 Stage III G2 Stage III G2 Stage III G3 Stage III G2 Stage I G3 Stage I G3 Stage I	T4 T3 T4 T4 T1 T3	M0 M0 M0 M0 M0 M0	N2 N2 N1 N3 N0 N0	7th 7th 7th 7th 7th 7th
TCGA-BR-8588-01A-11R-24 FEMALE TCGA-BR-8589-01A-11R-24 MALE TCGA-BR-8590-01A-11R-24 MALE TCGA-BR-8591-01A-11R-24 MALE TCGA-BR-8592-01A-11R-24 FEMALE TCGA-BR-8676-01A-11R-24 MALE	G3 Stage II G3 Stage III	T4 T4 T4 T4 T4 T3	M0 M0 M0 M0 M0 M0	N0 N1 N2 N3 N1 N3	7th 7th 7th 7th 7th 7th
TCGA-BR-8677-01A-11R-24 FEMALE TCGA-BR-8678-01A-11R-24 MALE TCGA-BR-8679-01A-11R-24 FEMALE TCGA-BR-8680-01A-11R-24 MALE TCGA-BR-8682-01A-11R-24 MALE TCGA-BR-8683-01A-11R-24 MALE	G3 Stage III G2 Stage I G2 Stage I G2 Stage IV G3 Stage II G3 Stage III	T3 T2 T2 T4 T4 T4	M0 M0 M1 M0 M0	N3 N0 N0 N2 N0 N2	7th 7th 7th 7th 7th 7th 7th
TCGA-BR-8686-01A-11R-24 MALE TCGA-BR-8687-01A-11R-24 FEMALE TCGA-BR-8690-01A-11R-24 FEMALE TCGA-BR-A44T-01A-32R-A2 FEMALE TCGA-BR-A44U-01A-11R-A2 MALE TCGA-BR-A4CR-01A-11R-A2 FEMALE	G3 Stage III G3 Stage III G2 Stage III G3 Stage II G3 Stage III G3 Stage III G3 Stage III	T4 T4 T3 T3 T3 T4	M0 M0 M0 M0 M0 M0	N1 N2 N3 N0 N3 N3	7th 7th 7th 7th 7th 7th
TCGA-BR-A4CS-01A-11R-A; MALE TCGA-BR-A4IV-01A-31R-A2 MALE TCGA-BR-A4J4-01A-12R-A2 MALE TCGA-BR-A4J5-01A-21R-A2 MALE TCGA-BR-A4J6-01A-11R-A2 FEMALE TCGA-BR-A4J8-01A-11R-A2 FEMALE TCGA-BR-A4J9-01A-12R-A2 MALE	G3 Stage III G3 Stage III G3 Stage III G3 Stage III G2 Stage II G3 Stage III G3 Stage III G3 Stage III	T4 T4 T4 T4 T3 T3 T3	M0 M0 M0 M0 M0 M0 M0	N3 N2 N2 N1 N0 N3 N0	7th 7th 7th 7th 7th 7th 7th
TCGA-BR-A4PF-01A-11R-A2MALE TCGA-BR-A4QL-01A-31R-A FEMALE TCGA-CD-5798-01A-11R-16MALE TCGA-CD-5799-01A-11R-16MALE TCGA-CD-5800-01A-11R-16FEMALE TCGA-CD-5801-01A-11R-16MALE	G3 Stage III G2 Stage III G2 Stage II G3 Stage II G3 Stage II G1 Stage II G3 Stage II	T4 T3 T3 T2 T3 T3	M0 M0 M0 M0 M0 M0	N2 N3 N0 N1 N0 N1	7th 7th 7th 7th 7th 7th 7th 7th
TCGA-CD-5803-01A-11R-1(FEMALE TCGA-CD-5813-01A-11R-1(MALE TCGA-CD-8524-01A-11R-2(FEMALE TCGA-CD-8525-01A-11R-2(FEMALE TCGA-CD-8526-01A-11R-2(FEMALE TCGA-CD-8527-01A-11R-2(FEMALE TCGA-CD-8527-01A-11R-11R-11R-11R-11R-11R-11R-11R-11R-1	G3 Stage II G4 Stage II	T3 T3 T3 T3 T3 T3	M0 M0 M0 M0 M0 M0	N0 N0 N0 N1 N1 N1	7th 7th 7th 7th 7th 7th 7th 7th
TCGA-CD-8528-01A-11R-25FEMALE TCGA-CD-8529-01A-11R-25MALE TCGA-CD-8530-01A-11R-25MALE TCGA-CD-8531-01A-11R-25FEMALE TCGA-CD-8532-01A-11R-25MALE TCGA-CD-8533-01A-11R-25MALE	G3 Stage III G2 Stage IV G3 Stage II G3 Stage II G3 Stage II G2 Stage II G3 Stage II G3 Stage II	T4 T4 T3 T3 T3 T3	M0 M1 M0 M0 M0 M0	N0 N0 N0 N1 N0 N0	7th 7th 7th 7th 7th 7th 7th 7th
TCGA-CD-8534-01A-11R-25MALE TCGA-CD-8535-01A-11R-25MALE TCGA-CD-A486-01A-11R-A MALE TCGA-CD-A487-01A-21R-A MALE TCGA-CD-A489-01A-11R-A MALE TCGA-CD-A48A-01A-12R-A MALE	G3 Stage II G3 Stage III G2 Stage II G3 Stage II G3 Stage II G3 Stage II G3 Stage II G2 Stage II	T3 T3 T3 T3 T3 T3	M0 M0 M0 M0 M0 M0	N0 N2 N0 N1 N0 N0	7th 7th 7th 7th 7th 7th 7th 7th
TCGA-CD-A48C-01A-11R-A FEMALE TCGA-CD-A4MG-01A-11R-/MALE TCGA-CD-A4MH-01A-11R-/FEMALE TCGA-CG-4301-01A-01R-11FEMALE TCGA-CG-4304-01A-01R-11MALE TCGA-CG-4305-01A-01R-11MALE	G3 Stage II G3 Stage II G2 Stage II G3 Stage IV G2 Stage I G3 Stage I G3 Stage I	T3 T3 T3 T4 T2 T2	M0 M0 M0 M1 M0 M0	N1 N0 N0 N2 N0 N1	7th 7th 7th 7th 7th 7th 7th
TCGA-CG-4306-01A-01R-11MALE TCGA-CG-4436-01A-01R-11MALE TCGA-CG-4437-01A-01R-18MALE TCGA-CG-4438-01A-01R-11MALE TCGA-CG-4440-01A-01R-11FEMALE TCGA-CG-4441-01A-01R-18MALE	G3 Stage IV G2 Stage I G2 Stage II G3 Stage III G3 Stage IV G2 Stage III	T3 T2 T2 T4 T3 T2	M1 M0 M0 M0 M1 M0	N0 N0 N2 N3 N3	7th 7th 7th 7th 7th 7th
TCGA-CG-4442-01A-01R-11MALE TCGA-CG-4443-01A-01R-11MALE TCGA-CG-4444-01A-01R-11MALE TCGA-CG-4460-01A-01R-11FEMALE TCGA-CG-4462-01A-01R-11FEMALE TCGA-CG-4465-01A-01R-11FEMALE	G3 Stage I G2 Stage III G3 Stage IVI G3 Stage IV G3 Stage IV	T2 T1 T3 T4 T3 T4	M0 M0 M0 M1 M1	N0 N0 N3 N1 N3 N3	7th 7th 7th 7th 7th 7th
TCGA-CG-4466-01A-01R-11FEMALE TCGA-CG-4469-01A-01R-11MALE TCGA-CG-4475-01A-01R-11MALE TCGA-CG-4476-01A-01R-11MALE TCGA-CG-4477-01A-01R-11FEMALE TCGA-CG-5716-01A-21R-18MALE	G2 Stage I G3 Stage III G3 Stage II G3 Stage III G3 Stage III G3 Stage I G2 Stage IV	T2 T3 T3 T4 T2 T4	M0 M0 M0 M0 M0 M1	N0 N3 N1 N3 N0 N2	7th 7th 7th 7th 7th 7th
TCGA-CG-5717-01A-11R-16MALE TCGA-CG-5718-01A-11R-16FEMALE TCGA-CG-5719-01A-11R-16FEMALE TCGA-CG-5720-01A-11R-16MALE TCGA-CG-5721-01A-11R-16MALE TCGA-CG-5722-01A-21R-16FEMALE	G3 Stage III G2 Stage III G1 Stage IV G3 Stage I G3 Stage III G3 Stage IV	T3 T3 T4 T2 T4 T3	M0 M0 M1 M0 M0 M1	N2 N2 N0 N0 N1 N3	7th 7th 7th 7th 7th 7th
TCGA-CG-5723-01A-11R-16MALE TCGA-CG-5724-01A-11R-16MALE TCGA-CG-5725-01A-11R-16MALE TCGA-CG-5726-01A-11R-16MALE TCGA-CG-5732-01A-11R-16MALE TCGA-CG-5734-01A-11R-16MALE	G3 Stage II G3 Stage IV G3 Stage I G2 Stage I G2 Stage III G3 Stage III	T2 T3 T2 T1 T2 T3	M0 M1 M0 M0 M0 M0	N1 N3 N0 N0 N3 N2	7th 7th 7th 7th 7th 7th
TCGA-D7-5577-01A-01R-16FEMALE TCGA-D7-5578-01A-01R-16MALE TCGA-D7-6520-01A-11R-18MALE TCGA-D7-6522-01A-11R-18MALE TCGA-D7-6524-01A-11R-18MALE TCGA-D7-6525-01A-11R-18MALE	G2 Stage III G3 Stage III G3 Stage III G3 Stage I G3 Stage I G3 Stage II G3 Stage II	T2 T3 T3 T2 T2 T2	M0 M0 M0 M0 M0 M0	N3 N2 N3 N0 N2 N2	7th 7th 7th 7th 7th 7th
TCGA-D7-6526-01A-11R-18 FEMALE TCGA-D7-6527-01A-11R-18 MALE TCGA-D7-6528-01A-11R-18 FEMALE TCGA-D7-6815-01A-11R-18 FEMALE TCGA-D7-6818-01A-11R-18 MALE TCGA-D7-6822-01A-11R-18 MALE	G2 Stage III G2 Stage I G2 Stage I G2 Stage I G3 Stage III G3 Stage III G2 Stage I	T3 T2 T2 T2 T2 T2	M0 M0 M0 M0 M0 M0	N2 N1 N0 N2 N3 N0	7th 7th 7th 7th 7th 7th
TCGA-D7-8570-01A-11R-23MALE TCGA-D7-8572-01A-11R-23MALE TCGA-D7-8573-01A-11R-23MALE TCGA-D7-8574-01A-13R-23MALE TCGA-D7-8575-01A-11R-23MALE TCGA-D7-8576-01A-11R-23FEMALE TCGA-D7-8578-01A-21R-23MALE	G3 Stage III G2 Stage II G3 Stage II G3 Stage III G3 Stage III G3 Stage III G3 Stage III G2 Stage I	T3 T2 T3 T2 T3 T3 T3	M0 M0 M0 M0 M0 M0 M0	N3 N2 N0 N3 N2 N3 N0	7th 7th 7th 7th 7th 7th 7th
TCGA-D7-8579-01A-21R-23 FEMALE TCGA-D7-84YU-01A-21R-A MALE TCGA-D7-A4YX-01A-11R-A MALE TCGA-D7-A4Z0-01A-22R-A FEMALE TCGA-D7-A6EV-01A-11R-A FEMALE TCGA-D7-A6EX-01A-11R-A FEMALE	G2 Stage II G3 Stage III G3 Stage II G3 Stage III	T2 T3 T3 T2 T2 T2 T3	M0 M0 M0 M0 M0 M0	N2 N3 N1 N2 N2 N2	7th 7th 7th 7th 7th 7th
TCGA-D7-A6EX-01A-11R-A(FEMALE TCGA-D7-A6EZ-01A-11R-A(FEMALE TCGA-D7-A6F0-01A-11R-A(FEMALE TCGA-D7-A6F2-01A-12R-A(MALE TCGA-D7-A747-01A-22R-A(MALE TCGA-D7-A748-01A-12R-A(FEMALE	G3 Stage III G3 Stage III G3 Stage I G3 Stage I G3 Stage I G3 Stage I G3 Stage II G3 Stage II	T3 T3 T2 T2 T3 T4	M0 M0 M0 M0 M0 M0 M1	N3 N2 N0 N0 N1 N3	7th 7th 7th 7th 7th 7th
TCGA-D7-A74A-01A-11R-A FEMALE TCGA-F1-6874-01A-11R-18 MALE TCGA-F1-6875-01A-11R-20 MALE TCGA-F1-A448-01A-11R-A2 MALE TCGA-F1-A72C-01A-21R-A3 MALE TCGA-FP-7829-01A-11R-20 MALE	G2 Stage III G3 Stage I G2 Stage I G3 Stage III G2 Stage III G2 Stage II G2 Stage II	T3 T2 T2 T3 T3 T3	M0 M0 M0 M0 M0 M0	N2 N0 N0 N3 N0 N1	7th 7th 7th 7th 7th 7th 7th 7th
TCGA-FP-8209-01A-11R-23 MALE TCGA-FP-8210-01A-11R-23 MALE TCGA-FP-A4BF-01A-12R-A3 MALE TCGA-HF-7132-01A-11R-20 MALE TCGA-HF-7133-01A-11R-20 FEMALE TCGA-HF-7134-01A-11R-20 MALE	G3 Stage I G3 Stage III G3 Stage III G2 Stage II G2 Stage III G2 Stage III G2 Stage I	T2 T3 T3 T3 T3 T1	M0 M0 M0 M0 M0 M0	N0 N2 N2 N1 N3 N0	7th 7th 7th 7th 7th 7th
TCGA-HF-A5NB-01A-11R-A FEMALE TCGA-HU-8244-01A-11R-2; FEMALE TCGA-HU-8249-01A-11R-A; MALE TCGA-HU-8602-01A-11R-24 FEMALE TCGA-HU-8604-01A-11R-24 FEMALE TCGA-HU-8608-01A-11R-24 MALE	G3 Stage III G1 Stage I G2 Stage III G3 Stage II G2 Stage II G3 Stage II G3 Stage III	T4 T1 T3 T4 T3 T4	M0 M0 M0 M0 M0 M0	N3 N0 N2 N0 N0 N0	7th 7th 7th 7th 7th 7th
TCGA-HU-8610-01A-22R-24MALE TCGA-HU-A4G2-01A-11R-AMALE TCGA-HU-A4G3-01A-11R-AMALE TCGA-HU-A4G8-01A-11R-AFEMALE TCGA-HU-A4G9-01A-11R-AFEMALE TCGA-HU-A4GC-01A-12R-AMALE	G2 Stage I G3 Stage II G2 Stage II G3 Stage II G2 Stage I G3 Stage I G3 Stage III	T1 T3 T2 T3 T1 T4	M0 M0 M0 M0 M0 M0	N0 N1 N2 N1 N0 N2	7th 7th 7th 7th 7th 7th
TCGA-HU-A4GD-01A-11R-/MALE TCGA-HU-A4GF-01A-11R-AMALE TCGA-HU-A4GH-01A-11R-/MALE TCGA-HU-A4GJ-01A-11R-A FEMALE TCGA-HU-A4GP-01A-11R-/MALE TCGA-HU-A4GQ-01A-11R-/MALE	G3 Stage II G2 Stage II G2 Stage I G3 Stage III G2 Stage II G2 Stage II	T3 T3 T1 T4 T2 T4	M0 M0 M0 M0 M0 M0	N1 N0 N0 N3 N1 N2	7th 7th 7th 7th 7th 7th 7th
TCGA-HU-A4GT-01A-21R-AFEMALE TCGA-HU-A4GU-01A-11R-AMALE TCGA-HU-A4GX-01A-12R-AFEMALE TCGA-HU-A4GY-01A-21R-AFEMALE TCGA-HU-A4H0-01A-11R-AMALE TCGA-HU-A4H2-01A-11R-AFEMALE TCGA-HU-A4H3-01A-21R-AFEMALE	G3 Stage II G3 Stage III G3 Stage III G3 Stage III G3 Stage III G2 Stage III G3 Stage III G3 Stage III	T3 T3 T4 T4 T4 T3 T4	M0 M0 M0 M0 M0 M0 M0	N0 N1 N2 N1 N3 N3	7th 7th 7th 7th 7th 7th 7th
TCGA-HU-A4H4-01A-21R-AFEMALE TCGA-HU-A4H6-01A-11R-AFEMALE TCGA-HU-A4H8-01A-11R-AMALE TCGA-HU-A4HB-01A-12R-AMALE TCGA-HU-A4HD-01A-11R-/MALE TCGA-IN-7806-01A-11R-20 MALE	G3 Stage III G2 Stage III G2 Stage I G3 Stage II G2 Stage II G2 Stage III G3 Stage III	T2 T3 T1 T2 T3	M0 M0 M0 M0 M0 M0	N2 N2 N1 N2 N2 N2	7th 7th 7th 7th 7th 7th 7th 7th
TCGA-IN-8462-01A-11R-23 MALE TCGA-IN-8663-01A-11R-24 MALE TCGA-IN-A6RI-01A-11R-A3 MALE TCGA-IN-A6RJ-01A-21R-A3 MALE TCGA-IN-A6RN-01A-12R-A FEMALE TCGA-IN-A6RO-01A-12R-A MALE	G2 Stage II G3 Stage II G2 Stage I G3 Stage I G2 Stage I G2 Stage II G2 Stage II	T2 T2 T1 T1 T1 T1	M0 M0 M0 M0 M0 M0	N1 N2 N0 N0 N0 N2 N0	7th 7th 7th 7th 7th 7th
TCGA-IN-A6RS-01A-12R-A3MALE TCGA-IN-A7NR-01A-11R-A3FEMALE TCGA-IN-A7NT-01A-21R-A3FEMALE TCGA-IN-A7NU-01A-22R-A MALE TCGA-IN-AB1V-01A-21R-A4MALE TCGA-IN-AB1X-01A-11R-A3FEMALE	G2 Stage I G3 Stage IV G3 Stage II G3 Stage III G2 Stage I G3 Stage I	T1 T3 T3 T3 T1 T3	M0 M1 M0 M0 M0 M0	N0 N3 N1 N3 N0 N0	7th 7th 7th 7th 7th 7th
TCGA-KB-A6F7-01A-12R-A3FEMALE TCGA-KB-A93G-01A-11R-A3MALE TCGA-KB-A93H-01A-11R-A3FEMALE TCGA-KB-A93J-01A-11R-A3MALE TCGA-MX-A5UG-01A-21R-/MALE TCGA-MX-A5UJ-01A-11R-AFEMALE	G3 Stage I G1 Stage I G1 Stage II G3 Stage II G3 Stage II G3 Stage III	T1 T2 T3 T3 T3 T3	M0 M0 M0 M0 M0 M0	N1 N0 N1 N1 N1 N2	7th 7th 7th 7th 7th 7th
TCGA-MX-A663-01A-11R-AMALE TCGA-R5-A7O7-01A-11R-AMALE TCGA-R5-A7ZE-01B-11R-ASFEMALE TCGA-R5-A7ZF-01A-11R-ASFEMALE TCGA-R5-A7ZI-01A-11R-ASFEMALE TCGA-R5-A805-01A-11R-ASMALE	G3 Stage II G2 Stage IV G2 Stage III G2 Stage IV G3 Stage IV G3 Stage III	T3 T3 T3 T4 T4 T3	M0 M1 M0 M1 M1 M0	N0 N1 N2 N1 N1	7th 7th 7th 7th 7th 7th
TCGA-RD-A7BS-01A-11R-A MALE TCGA-RD-A7BT-01A-11R-A MALE TCGA-RD-A7BW-01A-11R-/FEMALE TCGA-RD-A7C1-01A-11R-A MALE TCGA-RD-A8MV-01A-11R-/MALE TCGA-RD-A8MW-01A-11R- MALE	G3 Stage III G3 Stage III G3 Stage I G3 Stage I G3 Stage III G3 Stage III G3 Stage III	T3 T3 T2 T2 T3 T3	M0 M0 M0 M0 M0 M0	N2 N3 N0 N0 N3 N3	7th 7th 7th 7th 7th 7th
TCGA-RD-A8N0-01A-12R-AFEMALE TCGA-RD-A8N1-01A-12R-AMALE TCGA-RD-A8N2-01A-12R-AFEMALE TCGA-RD-A8N4-01A-21R-AFEMALE TCGA-RD-A8N5-01A-12R-AMALE TCGA-RD-A8N9-01A-12R-AFEMALE	G3 Stage III G3 Stage III G3 Stage I G3 Stage III G2 Stage III G3 Stage III	T3 T3 T2 T3 T3	M0 M0 M0 M0 M0 M0	N3 N3 N0 N2 N2 N3	7th 7th 7th 7th 7th 7th
TCGA-RD-A8N9-01A-12R-AFEMALE TCGA-RD-A8NB-01A-12R-AFEMALE TCGA-SW-A7EB-01A-11R-AMALE TCGA-VQ-A8DT-01A-11R-AMALE TCGA-VQ-A8DU-01A-11R-AMALE TCGA-VQ-A8DV-01A-12R-AMALE	G3 Stage II G3 Stage III G2 Stage III G3 Stage III G2 Stage III G2 Stage I	T2 T3 T3 T3 T3 T2	M0 M0 M0 M0 M0 M0	N1 N2 N2 N3 N2 N0	7th 7th 7th 7th 7th 7th
TCGA-VQ-A8DZ-01A-11R-AMALE TCGA-VQ-A8E0-01A-11R-A MALE TCGA-VQ-A8E2-01A-11R-A MALE TCGA-VQ-A8E3-01A-11R-A MALE TCGA-VQ-A8E7-01B-11R-A MALE TCGA-VQ-A8P2-01A-11R-A MALE	G3 Stage IV G3 Stage III G2 Stage III G3 Stage II G2 Stage IV G2 Stage III	T4 T3 T3 T3 T3 T4	M1 M0 M0 M0 M1 M0	N3 N2 N3 N0 N1	7th 7th 7th 7th 7th 7th
TCGA-VQ-A8P3-01A-11R-A MALE TCGA-VQ-A8P5-01A-11R-A MALE TCGA-VQ-A8P8-01A-11R-A FEMALE TCGA-VQ-A8PB-01A-11R-A FEMALE TCGA-VQ-A8PC-01A-11R-A MALE TCGA-VQ-A8PD-01A-11R-A MALE	G2 Stage III G3 Stage II G2 Stage II G2 Stage II G3 Stage II G3 Stage II G2 Stage III	T4 T3 T4 T3 T3	M0 M0 M0 M0 M0 M0	N1 N0 N0 N0 N1 N3	7th 7th 7th 7th 7th 7th
TCGA-VQ-A8PE-01A-11R-A MALE TCGA-VQ-A8PF-01A-11R-A MALE TCGA-VQ-A8PH-01A-12R-A MALE TCGA-VQ-A8PK-01A-12R-A MALE TCGA-VQ-A8PM-01A-21R-/ MALE TCGA-VQ-A8PO-01A-11R-/ MALE TCGA-VO-A8PP-01A-21R-A MALE	G3 Stage III G3 Stage III G2 Stage III G2 Stage III G3 Stage III G3 Stage III G3 Stage III G4 Stage III	T3 T3 T3 T3 T4 T4	M0 M0 M0 M0 M0 M0	N3 N3 N3 N3 N3 N0	7th 7th 7th 7th 7th 7th
TCGA-VQ-A8PP-01A-21R-AMALE TCGA-VQ-A8PQ-01A-11R-FEMALE TCGA-VQ-A8PU-01A-12R-AFEMALE TCGA-VQ-A8PX-01A-12R-AMALE TCGA-VQ-A91A-01A-11R-AMALE TCGA-VQ-A91F-01A-31R-AFEMALE	G2 Stage III G2 Stage IV G3 Stage III G2 Stage I G1 Stage III G2 Stage III G2 Stage III	T4 T4 T4 T1 T3 T4	M0 M1 M0 M0 M0 M0	N2 N2 N1 N0 N3 N2	7th 7th 7th 7th 7th 7th
TCGA-VQ-A91E-01A-31R-A FEMALE TCGA-VQ-A91K-01A-11R-A MALE TCGA-VQ-A91N-01A-11R-A FEMALE TCGA-VQ-A91Q-01A-12R-A MALE TCGA-VQ-A91U-01A-11R-A MALE TCGA-VQ-A91V-01A-11R-A MALE	G3 Stage III G2 Stage III G2 Stage III G3 Stage III G2 Stage II G2 Stage II	T4 T3 T4 T3 T3 T3	M0 M0 M0 M0 M0 M0	N0 N2 N3 N3 N1 N2	7th 7th 7th 7th 7th 7th
TCGA-VQ-A91X-01A-12R-A MALE TCGA-VQ-A91Y-01A-11R-A MALE TCGA-VQ-A91Z-01A-11R-A FEMALE TCGA-VQ-A922-01A-11R-A MALE TCGA-VQ-A923-01A-11R-A MALE TCGA-VQ-A924-01A-11R-A MALE TCGA-VQ-A925-01A-11R-A MALE	G3 Stage III G3 Stage III G2 Stage II G2 Stage III G3 Stage III G3 Stage III G2 Stage II G2 Stage III	T3 T4 T3 T4 T3 T3	M0 M0 M0 M0 M0 M0 M0	N3 N3 N1 N1 N2 N0 N2	7th 7th 7th 7th 7th 7th 7th
TCGA-VQ-A925-01A-11R-A MALE TCGA-VQ-A927-01A-12R-A MALE TCGA-VQ-A928-01A-11R-A MALE TCGA-VQ-A92D-01A-11R-A MALE TCGA-VQ-A94O-01A-11R-A MALE TCGA-VQ-A94T-01A-11R-A MALE TCGA-VQ-A94U-01A-12R-A MALE	G1 Stage III G2 Stage III G2 Stage II G2 Stage III G3 Stage III G3 Stage III	T3 T3 T3 T4 T3	M0 M0 M0 M0 M0 M0 M0	N2 N3 N3 N0 N3 N3 N0	7th 7th 7th 7th 7th 7th 7th 7th 7th
TCGA-VQ-AA64-01A-11R-AMALE TCGA-VQ-AA68-01A-11R-AFEMALE TCGA-VQ-AA69-01A-11R-AMALE TCGA-VQ-AA6A-01A-11R-AMALE TCGA-VQ-AA6D-01A-11R-AFEMALE TCGA-VQ-AA6F-01A-31R-AMALE	G2 Stage III G2 Stage II	T3 T4 T3 T4 T4 T3	M0 M0 M0 M0 M0 M0	N2 N3 N2 N3 N1	7th 7th 7th 7th 7th 7th
TCGA-VQ-AA6G-01A-11R-#MALE TCGA-VQ-AA6J-01A-11R-AMALE TCGA-VQ-AA6K-01A-11R-AMALE	G2 Stage II G3 Stage III G3 Stage III	T3 T4 T4	M0 M0 M0	N0 N2 N3	7th 7th 7th

OAI DII-TUI Walu	GGAGCGAGATCCCTCCAAAAT
GAPDH-Reverse	GGCTGTTGTCATACTTCTCATGG
CPNE8-Forward	GAATGGAGAGAGTTTGGAAGA
CPNE8-Reverse	GTCATGTTTGGATAAGTTGGG
PTK2(FAK)-Forward	CCAGGTCAGGCATCTCTT
PTK2(FAK)-Reverse	CCTCGCAGGTCCAATACT
ERK-Forward	TACACCAACCTCTCGTACATCG
ERK-Reverse	CATGTCTGAAGCGCAGTAAGATT
CCR4-Forward	GCTCCCTGGAAATCAACA
CCR4-Reverse	TCATCTTCACCGCCTTG
CXCR4-Forward	ACTACACCGAGGAAATGGGCT

Primer name

GAPDH-Forward

CXCR4-Reverse

Sequence (5' to 3')

GGAGCGAGATCCCTCCAAAAT

CCCACAATGCCAGTTAAGAAGA