

Table S1 Assay IDs of Low Density Array

Assay ID	Gene Symbol	Gene Name	Amplicon size (bp)	Assay ID	Gene Symbol	Gene Name	Amplicon size (bp)
Hs03929097_g1	<i>GAPDH</i>	glyceraldehyde-3-phosphate dehydrogenase	58	Hs00171254_m1	<i>IGF2</i>	insulin-like growth factor 2	93
Hs00184500_m1	<i>ABCB1</i>	ATP-binding cassette; sub-family B (MDR/TAP); member 1	67	Hs01001469_m1	<i>ITGB3</i>	beta 3 (platelet glycoprotein IIIa; antigen CD61)	59
Hs00219905_m1	<i>ABCC1</i>	ATP-binding cassette; sub-family C (CFTR/MRP); member 1	74	Hs00855332_g1	<i>LDHA</i>	lactate dehydrogenase A	130
Hs00357333_g1	<i>ACTB</i>	actin; beta;	77	Hs00182031_m1	<i>LRP5</i>	low density lipoprotein receptor-related protein 5	73
Hs00169867_m1	<i>ANGPT2</i>	angiopoietin 2	73	Hs00902194_m1	<i>MAPT</i>	microtubule-associated protein tau	59
Hs00181051_m1	<i>APC</i>	adenomatous polyposis coli	62	Hs01037698_m1	<i>MGMT</i>	O-6-methylguanine-DNA methyltransferase	71
Hs00950669_m1	<i>AREG</i>	amphiregulin	66	Hs00179866_m1	<i>MLH1</i>	mutL homolog 1; colon cancer; nonpolyposis type 2 (E. coli)	103
Hs00180269_m1	<i>BAX</i>	BCL2-associated X protein	62	Hs01114487_m1	<i>MTHFR</i>	methylenetetrahydrofolate reductase (NAD(P)H)	87
Hs99999018_m1	<i>BCL2</i>	B-cell CLL/lymphoma 2	76	Hs03005094_m1	<i>MUC2</i>	mucin 2; oligomeric mucus/gel-forming	64
Hs00375807_m1	<i>BCL2L11</i>	BCL2-like 11 (apoptosis facilitator)	64	Hs00169777_m1	<i>PECAM1</i>	platelet/endothelial cell adhesion molecule 1	65
Hs00971716_m1	<i>CAV1</i>	caveolae protein; 22kDa	66	Hs01047228_m1	<i>PLA2G2A</i>	phospholipase A2; group IIA (platelets; synovial fluid)	84
Hs99999189_m1	<i>CDKN2A</i>	cyclin-dependent kinase inhibitor 2A	72	Hs01547054_m1	<i>PLAU</i>	plasminogen activator; urokinase	61
Hs00234480_m1	<i>DAPK1</i>	death-associated protein kinase 1	76	Hs02621230_s1	<i>PTEN</i>	phosphatase and tensin homolog	135
Hs00758822_s1	<i>DHFR</i>	dihydrofolate reductase	75	Hs00153133_m1	<i>PTGS2</i>	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)	75
Hs00559278_m1	<i>DPYD</i>	dihydropyrimidine dehydrogenase	71	Hs00230746_m1	<i>REG4</i>	regenerating islet-derived family; member 4	58
Hs00984632_gH	<i>DUT</i>	deoxyuridine triphosphatase	87	Hs00420895_gH	<i>RPLP0</i>	ribosomal protein; large; P0	76
Hs00153451_m1	<i>E2F1</i>	E2F transcription factor 1	84	Hs00168784_m1	<i>RRM1</i>	ribonucleotide reductase M1	78
Hs01099999_m1	<i>EGF</i>	epidermal growth factor	70	Hs00357247_g1	<i>RRM2</i>	ribonucleotide reductase M2	79
Hs01076078_m1	<i>EGFR</i>	epidermal growth factor receptor	60	Hs00231709_m1	<i>RUNX3</i>	runt-related transcription factor 3	77
Hs01001580_m1	<i>ERBB2</i>	v-erb-b2 erythroblastic leukemia viral oncogene homolog 2	60	Hs00190328_m1	<i>SEMA3B</i>	immunoglobulin domain (Ig); short basic domain; secreted; (semaphorin) 3B	67
Hs01012158_m1	<i>ERCC1</i>	excision repair cross-complementing rodent repair deficiency	55	Hs00234160_m1	<i>SPARC</i>	secreted protein; acidic; cysteine-rich (osteonectin)	76
Hs00914313_m1	<i>EREG</i>	epiregulin	65	Hs00608187_m1	<i>TGFA</i>	transforming growth factor; alpha	70
Hs00174860_m1	<i>ESR1</i>	estrogen receptor 1	62	Hs00962908_m1	<i>THBS1</i>	thrombospondin 1	59
Hs00544830_m1	<i>EZH2</i>	enhancer of zeste homolog 2 (Drosophila)	86	Hs00243257_m1	<i>TOP1</i>	topoisomerase (DNA) I	101
Hs00163653_m1	<i>FAS</i>	Fas (TNF receptor superfamily; member 6)	85	Hs03063307_m1	<i>TOP2A</i>	topoisomerase (DNA) II alpha 170kDa	72
Hs00909424_g1	<i>FPGS</i>	folylpolyglutamate synthase	85	Hs00157317_m1	<i>TYMP</i>	thymidine phosphorylase	95
Hs00169255_m1	<i>GADD45A</i>	growth arrest and DNA-damage-inducible; alpha;	123	Hs00426586_m1	<i>TYMS</i>	thymidylate synthetase	60
Hs00914163_m1	<i>GGH</i>	gamma-glutamyl hydrolase	91	Hs00923517_m1	<i>UMPS</i>	uridine monophosphate synthetase	85
Hs00989184_m1	<i>GZMA</i>	granzyme A	56	Hs01066247_m1	<i>UPP1</i>	uridine phosphorylase 1	68
Hs02621185_s1	<i>HDAC1</i>	histone deacetylase 1	103	Hs01003372_m1	<i>VCAM1</i>	vascular cell adhesion molecule 1	62
Hs00180737_m1	<i>HPSE</i>	heparanase	59	Hs00900055_m1	<i>VEGFA</i>	vascular endothelial growth factor A	59
Hs00609566_m1	<i>IGF1R</i>	insulin-like growth factor 1 receptor	64				

Gastric Cancer

Title: Impact of insulin-like growth factor 1 receptor and amphiregulin expression on survival in patients with stage II/III gastric cancer enrolled in the Adjuvant Chemotherapy Trial of S-1 for Gastric Cancer

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Table S2 MIQE guidelines check list

EXPERIMENTAL DESIGN	ITEM TO CHECK	IMPORTANCE	CHECKLIST
	Definition of experimental and control groups	E	Checked
	Number within each group	E	Checked
	Assay carried out by core lab or investigator's lab?	D	Checked
	Acknowledgement of authors' contributions	D	Checked
	SAMPLE		
	Description	E	Checked
	Volume/mass of sample processed	D	Checked
	Microdissection or macrodissection	E	Checked
	Processing procedure	E	Checked
	If frozen - how and how quickly?	E	Checked
	If fixed - with what, how quickly?	E	Checked
	Sample storage conditions and duration (especially for FFPE samples)	E	Checked
	NUCLEIC ACID EXTRACTION		
	Procedure and/or instrumentation	E	Checked
	Name of kit and details of any modifications	E	Checked
	Source of additional reagents used	D	Checked
	Details of DNase or RNase treatment	E	Checked
	Contamination assessment (DNA or RNA)	E	Checked
	Nucleic acid quantification	E	Checked
	Instrument and method	E	Checked
	Purity (A260/A280)	D	NA
	Yield	D	NA
	RNA integrity method/instrument	E	NA
	RIN/RQI or Cq of 3' and 5' transcripts	E	NA
	Electrophoresis traces	D	NA
	Inhibition testing (Cq dilutions, spike or other)	E	NA
	REVERSE TRANSCRIPTION		
	Complete reaction conditions	E	Checked
	Amount of RNA and reaction volume	E	Checked
	Priming oligonucleotides (if using GSP) and concentration	E	Checked
	Reverse transcriptase and concentration	E	Checked
	Temperature and time	E	Checked
	Manufacturer of reagents and catalogue numbers	D	Checked
	Eg with and without RT	D*	
	Storage conditions of cDNA	D	Checked
	qPCR TARGET INFORMATION		
	If multiplex, efficiency and LOD of each assay.	E	NA
	Sequence accession number	E	Checked
	Location of amplicon	D	
	Amplicon length	E	Checked
	In silico specificity screen (BLAST, etc)	E	Checked
	Pseudogenes, retrospseudogenes or other homologs?	D	
	Sequence alignment	D	
	Secondary structure analysis of amplicon	D	
	Location of each primer by exon or intron (if applicable)	E	Checked
	What splice variants are targeted?	E	Checked
	qPCR OLIGONUCLEOTIDES		
	Primer sequences	E	Checked
	RTPrimerDB Identification Number	D	
	Probe sequences	D**	
	Location and identity of any modifications	E	Checked
	Manufacturer of oligonucleotides	D	Checked
	Purification method	D	
	qPCR PROTOCOL		
	Complete reaction conditions	E	Checked
	Reaction volume and amount of cDNA/DNA	E	Checked
	Primer (probe), Mg++, and dNTP concentrations	E	Checked
	Polymerase identity and concentration	E	Checked
	Buffer/kit identity and manufacturer	E	Checked
	Exact chemical constitution of the buffer	D	Checked
	Additives (SYBR Green 1, DMSO, etc.)	E	Checked
	Manufacturer of plates/tubes and catalog number	D	Checked
	Complete thermocycling parameters	E	Checked
	Reaction setup (manual/robotic)	D	Checked
	Manufacturer of qPCR instrument	E	Checked
	qPCR VALIDATION		
	Evidence of optimisation (from gradients)	D	
	Specificity (gel, sequence, melt, or digest)	E	Checked
	For SYBR Green 1, Cq of the NTC	E	Checked
	Standard curves with slope and y-intercept	E	Checked
	PCR efficiency calculated from slope	E	Checked
	Confidence interval for PCR efficiency or standard error	D	
	r2 of standard curve	E	Checked
	Linear dynamic range	E	Checked
	Cq variation at lower limit	E	Checked
	Confidence intervals throughout range	D	
	Evidence for limit of detection	E	Checked
	PCR efficiency and LOD of each assay.	E	Checked
	DATA ANALYSIS		
	qPCR analysis program (source, version)	E	Checked
	Cq method determination	E	Checked
	Outlier identification and disposition	E	Checked
	Results of NTCs	E	Checked
	Justification of number and choice of reference genes	E	Checked
	Description of normalisation method	E	Checked
	Number and concordance of biological replicates	D	Checked
	Number and stage (RT or qPCR) of technical replicates	E	Checked
	Repeatability (intra-assay variation)	E	Checked
	Reproducibility (inter-assay variation, %CV)	D	
	Power analysis	D	NA
	Statistical methods for result significance	E	Checked
	Software (source, version)	E	Checked
	Eg. or raw data submission using RDML	D	

Memo

Surgely only arm vs. S-1 treatment arm
 Surgely only (414) vs. S-1 treatment (412)
 Faico biosystems Co., Ltd. Kyoto-City, Japan

FFPE specimens (10um thick / up to 5 slices)
 Macrodissected samples

various period of time of storage (65 institutions/ archived block)

Rnaseasy mini kit (QIAGEN)
 none
 Dnase I digestion on spin column
 Gene Specific probe / primer design

Nano-drop system
 NA
 NA
 NA
 NA
 NA

According to the manufacture's protocol
 2.5ug total RNA
 Random hexamer (High-Capacity cDNA Reverse Transcription kits(Applied Biosystems)
 According to kit protocol
 25degree 10min, 37 degree 2hours, 85degree 5 sec
 ABI Catalogue number = 4368814 / 200 reaction

below - 20 degree celsius

NA

Described in supplemental table

Described in supplemental table
 ABI designed taqman assay (Low Density Card) were employed.
 92.1% of assay are "m1", namely mRNA specific, whose probe spans an exon-exon junction and will not detect genomic DNA.

3.6% of assay are "g1", whose probe spans an exon-exon junction, however, the assay may detect genomic DNA if present in the sample.

4.2% of assay are "s1", whose primers and probes are designed within a single exon, such assays will, by devinition detect genomic DNA.

Exon

As described above

Sequence information is not disclosed by ABI
 Sequence information is not disclosed by ABI
 Sequence information is not disclosed by ABI
 Sequence information is not disclosed by ABI

According to the manufacture's protocol
 1ng cDNA / 1ul of reaction mixture, Reaction volume per well = 3ul
 Not disclosed by ABI
 Primer (900nM), Probe (250nM)
 TaqMan Gene Expression Master Mix (Parts Number : 4369016)
 Not disclosed by ABI

TaqMan Arrays (384-well micro Fluidic cards Parts Number = MFC_384)
 2 min at 50°C and 10 min at 94.5°C for 40 cycles (30 s at 97°C and 1 min at 59.7°C).
 Manual
 7900HT Fast Real-Time PCR System

This issue may not be suitable for 384-well micro Fluidic cards system. However Applied Biosystems recommend double-delta Ct method for this system, namely, standard curve and PCR efficacy are well controlled in the systems.
 NTC well assigned

This issue may not be suitable for 384-well micro Fluidic cards system. However Applied Biosystems recommend double-delta Ct method for this system, namely, slope of standard curve are nearly -.332 for all primers.

This issue may not be suitable for 384-well micro Fluidic cards system. However Applied Biosystems recommend double-delta Ct method for this system, therefore, efficacy of reaction are nearly 100% for all primers.

Double delta Ct method employed (ABI confirmed)
 Double delta Ct method employed (ABI confirmed)
 Double delta Ct method employed (ABI confirmed)
 Double delta Ct method employed (ABI confirmed)
 Not multiplex assay

Sequence dilution software (ABI)
 Auto threshold
 Outlier rejection enabled on the software.
 No amplification in NTC confirmed
 Eight house-keeping gene were utilized. (ACTB, B2M, GAPDH, GUSB, HMBS, RPLP0, YWHA2 and 18S)
 Geometric mean of eight house-keeping genes were employed followed by log2 transformation.
 Ct differences of duplicated data were checked.
 Ct differences of duplicated data were checked.
 Ct differences of duplicated data were checked.

Exploratory study design (not priory power calculation)
 Cox proportional hazard model, Log-Rank test, (Benjamini and Hochberg false discovery rate (FDR) controlling procedure)
 SAS ver 8 & JMP software (SAS institute, JAPAN)

Table 1. MIQE checklist for authors, reviewers and editors. All essential information (E) must be submitted with the manuscript. Desirable

information (D) should be submitted if available. If using primers obtained from RTPrimerDB, information on qPCR target, oligonucleotides, protocols and validation is available from that source.

** Assessing the absence of DNA using a no RT assay is essential when first extracting RNA. Once the sample has been validated as RNA-free, inclusion of a no-RT control is desirable, but no longer essential.

Table S3

Characteristics of the patients	S-1 (n = 415)	Surgery only (n = 414)	P value ^a
Sex, n (%)			0.9
Male	282 (68.0)	283 (68.4)	
Female	133 (32.0)	131 (31.6)	
Age, n (%)			0.72
<60	160 (38.6)	158 (38.2)	
60–69	149 (35.9)	161 (38.9)	
70–80	106 (25.5)	95 (22.9)	
Median, y	63	62	
Range, y	27–80	33–80	
Tumor stage, n (%)			0.93
T1	1 (0)	0 (0)	
T2	222 (53.5)	223 (53.9)	
T3	180 (43.4)	182 (44.0)	
T4	12 (2.9)	9 (2.2)	
Nodal stage, n (%) ^b			0.52
N0	40 (9.6)	52 (12.6)	
N1	233 (56.1)	222 (53.6)	
N2	142 (34.2)	140 (33.8)	
N3	0 (0)	0 (0)	
Lymph-node metastases, n (%)		0.18	
0	40 (9.6)	52 (12.6)	
1–6	254 (61.2)	254 (61.4)	
7–15	97 (23.4)	85 (20.5)	
≥16	24 (5.8)	23 (5.6)	
Cancer stage, n (%) ^c			0.48
II	183 (44.1)	189 (45.7)	
IIIA	159 (38.3)	162 (39.1)	
IIIB	73 (17.6)	63 (15.2)	
IV	0 (0)	0 (0)	
Histologic type, n (%) ^d			0.91
Differentiated	166 (40.0)	166 (40.1)	
Undifferentiated	249 (60.0)	245 (59.2)	

a) P values for sex were calculated with the use of the χ^2 test. P values for age, tumor stage, nodal stage, number of lymph-node metastases, cancer stage (Japanese classification), and histologic type were calculated with the use of the Wilcoxon test.

b) Nodal stages according to the Japanese classification were defined as follows: N0, no evidence of lymph node metastasis; N1, metastasis to group 1 lymph nodes; N2, metastasis to group 2 lymph nodes; N3, metastasis to group 3 lymph nodes. Groups 1, 2, and 3 are regional lymph node classifications defined according to the location of the primary tumor and are based on the results of studies of lymphatic flow at various tumor sites and the observed survival associated with metastasis at each nodal station (i.e., position in relation to primary node).

c) Cancer stages according to the Japanese classification were defined as follows: stage IA, T1N0; stage IB, T1N1 or T2N0; stage II, T1N2, T2N1, or T3N0; stage IIIA, T2N2, T3N1, or T4N0; stage IIIB, T3N2 or T4N1; stage IV, T4N2, any T stage with N3, or distant metastasis.

d) In entire population of ACTS-GC, histologic type was classified among eligible patients (n = 1,034). In the surgery-only group of biomarker study population, cancers could not be classified as differentiated or undifferentiated in 3 patients.

Table S4 Univariate analysis of RFS for all patients

Gene Symbol	Log-Rank P	BH-FDR_P	Hazard ratio	95%Low	95%High
<i>IGF1R</i>	1.30E-04	0.007	1.539	1.232	1.922
<i>THBS1</i>	2.13E-03	0.117	1.413	1.132	1.763
<i>ERBB2</i>	2.71E-03	0.146	1.40	1.12	1.74
<i>AREG</i>	5.88E-03	0.312	0.73	0.59	0.92
<i>LRP5</i>	8.33E-03	0.433	1.35	1.08	1.68
<i>EGFR</i>	1.01E-02	0.517	1.34	1.07	1.68
<i>GZMA</i>	1.80E-02	0.900	0.76	0.60	0.95
<i>EZH2</i>	4.98E-02	0.920	0.80	0.63	1.00
<i>MAPT</i>	5.33E-02	0.920	1.28	1.00	1.65
<i>PTEN</i>	5.45E-02	0.920	0.81	0.65	1.00
<i>FAS</i>	5.87E-02	0.920	0.80	0.64	1.01
<i>ANGPT2</i>	6.16E-02	0.920	1.24	0.99	1.56
<i>TGFA</i>	7.20E-02	0.920	1.23	0.98	1.55
<i>MUC2</i>	8.36E-02	0.920	0.81	0.63	1.03
<i>CAV1</i>	8.55E-02	0.920	1.21	0.97	1.51
<i>PECAM1</i>	9.57E-02	0.920	1.20	0.97	1.50
<i>LDHA</i>	1.02E-01	0.920	0.83	0.67	1.04
<i>TYMP</i>	1.05E-01	0.920	0.83	0.67	1.04
<i>SPARC</i>	1.07E-01	0.920	1.20	0.96	1.49
<i>UMPS</i>	1.23E-01	0.920	0.84	0.67	1.05
<i>UPP1</i>	1.28E-01	0.920	0.84	0.67	1.05
<i>ABCC1</i>	1.32E-01	0.920	1.19	0.95	1.48
<i>ERCC1</i>	1.35E-01	0.920	1.18	0.95	1.47
<i>RUNX3</i>	1.63E-01	0.920	0.85	0.68	1.07
<i>GADD45A</i>	2.05E-01	0.920	1.18	0.91	1.52
<i>DHFR</i>	2.06E-01	0.920	0.87	0.70	1.08
<i>DAPK1</i>	2.07E-01	0.920	1.16	0.92	1.45
<i>TOP1</i>	2.15E-01	0.920	0.87	0.70	1.08

Gene Symbol	Log-Rank P	BH-FDR_P	Hazard ratio	95%Low	95%High
<i>DUT</i>	2.29E-01	0.920	0.87	0.70	1.09
<i>TYMS</i>	2.41E-01	0.920	0.88	0.70	1.09
<i>PLA2G2A</i>	2.43E-01	0.920	0.85	0.66	1.11
<i>PTGS2</i>	3.48E-01	0.920	0.90	0.72	1.12
<i>EREG</i>	3.54E-01	0.920	0.88	0.68	1.15
<i>HPSE</i>	4.42E-01	0.920	0.92	0.73	1.14
<i>GGH</i>	4.45E-01	0.920	1.09	0.87	1.38
<i>FPGS</i>	4.54E-01	0.920	1.09	0.87	1.36
<i>ABCB1</i>	4.81E-01	0.920	0.92	0.73	1.16
<i>MLH1</i>	4.98E-01	0.920	0.92	0.73	1.16
<i>TOP2A</i>	5.32E-01	0.920	1.07	0.86	1.34
<i>ITGB3</i>	5.52E-01	0.920	1.07	0.86	1.33
<i>ESR1</i>	5.79E-01	0.920	0.94	0.75	1.18
<i>VEGFA</i>	5.88E-01	0.920	1.06	0.85	1.32
<i>RRM1</i>	6.30E-01	0.920	1.06	0.85	1.32
<i>REG4</i>	6.45E-01	0.920	0.95	0.76	1.19
<i>HDAC1</i>	6.68E-01	0.920	0.95	0.76	1.19
<i>BCL2</i>	6.78E-01	0.920	1.05	0.83	1.34
<i>DPYD</i>	6.87E-01	0.920	1.05	0.84	1.31
<i>BCL2L11</i>	6.98E-01	0.920	0.95	0.71	1.25
<i>RRM2</i>	7.45E-01	0.920	0.96	0.77	1.20
<i>APC</i>	8.29E-01	0.920	1.02	0.82	1.28
<i>PLAU</i>	8.31E-01	0.920	0.98	0.78	1.22
<i>E2F1</i>	8.39E-01	0.920	0.98	0.78	1.23
<i>MGMT</i>	8.96E-01	0.920	0.99	0.79	1.23
<i>BAX</i>	9.02E-01	0.920	0.99	0.79	1.23
<i>MTHFR</i>	9.17E-01	0.920	1.01	0.80	1.28
<i>VCAM1</i>	9.20E-01	0.920	1.01	0.81	1.26

BH-FDR_P : Benjamini & Hochberg false discovery rate

Table S5 Univariate analysis of RFS for surgery-only arm

Gene Symbol	Log-Rank P	BH-FDR_P	Hazard ratio	95%Low	95%High
<i>IGF1R</i>	3.58E-04	0.020	1.692	1.263	2.266
<i>ERBB2</i>	8.08E-03	0.444	1.475	1.104	1.970
<i>EZH2</i>	1.24E-02	0.669	0.68	0.51	0.92
<i>ERCC1</i>	1.50E-02	0.795	1.43	1.07	1.91
<i>LRP5</i>	2.19E-02	0.980	1.40	1.05	1.87
<i>THBS1</i>	3.28E-02	0.980	1.37	1.02	1.83
<i>LDHA</i>	3.38E-02	0.980	0.73	0.55	0.98
<i>AREG</i>	5.06E-02	0.980	0.75	0.56	1.00
<i>ANGPT2</i>	6.18E-02	0.980	1.33	0.99	1.80
<i>TGFA</i>	7.11E-02	0.980	1.32	0.98	1.78
<i>EGFR</i>	8.11E-02	0.980	1.30	0.97	1.73
<i>PTEN</i>	8.27E-02	0.980	0.78	0.58	1.03
<i>APC</i>	9.41E-02	0.980	1.28	0.96	1.71
<i>HPSE</i>	1.07E-01	0.980	0.79	0.59	1.05
<i>MAPT</i>	1.22E-01	0.980	1.30	0.93	1.82
<i>PLA2G2A</i>	1.42E-01	0.980	0.77	0.54	1.09
<i>ABCC1</i>	1.43E-01	0.980	1.24	0.93	1.67
<i>MUC2</i>	1.70E-01	0.980	0.80	0.57	1.10
<i>EREG</i>	1.82E-01	0.980	0.79	0.56	1.12
<i>E2F1</i>	1.83E-01	0.980	1.22	0.91	1.65
<i>DHFR</i>	1.87E-01	0.980	0.82	0.62	1.10
<i>UPP1</i>	1.95E-01	0.980	0.83	0.62	1.10
<i>SPARC</i>	2.11E-01	0.980	1.20	0.90	1.60
<i>FAS</i>	2.14E-01	0.980	0.83	0.61	1.12
<i>TOP1</i>	2.24E-01	0.980	0.84	0.63	1.12
<i>GZMA</i>	2.37E-01	0.980	0.83	0.61	1.13
<i>UMPS</i>	2.39E-01	0.980	0.84	0.62	1.13
<i>TYMP</i>	2.54E-01	0.980	0.84	0.63	1.13

Gene Symbol	Log-Rank P	BH-FDR_P	Hazard ratio	95%Low	95%High
<i>MTHFR</i>	3.08E-01	0.980	1.18	0.86	1.61
<i>FPGS</i>	3.15E-01	0.980	1.16	0.87	1.55
<i>RRM2</i>	3.43E-01	0.980	0.87	0.65	1.16
<i>BCL2</i>	3.52E-01	0.980	1.17	0.84	1.61
<i>CAV1</i>	3.62E-01	0.980	1.14	0.86	1.52
<i>PTGS2</i>	3.65E-01	0.980	0.87	0.65	1.17
<i>HDAC1</i>	3.69E-01	0.980	0.88	0.66	1.17
<i>DAPK1</i>	3.82E-01	0.980	1.14	0.85	1.54
<i>DUT</i>	3.92E-01	0.980	0.88	0.66	1.18
<i>ABCB1</i>	3.97E-01	0.980	1.14	0.84	1.55
<i>REG4</i>	4.07E-01	0.980	0.88	0.66	1.19
<i>VEGFA</i>	4.10E-01	0.980	1.13	0.85	1.50
<i>GGH</i>	4.35E-01	0.980	1.13	0.83	1.53
<i>ESR1</i>	4.45E-01	0.980	0.89	0.66	1.20
<i>GADD45A</i>	5.98E-01	0.980	1.09	0.79	1.52
<i>PECAM1</i>	6.23E-01	0.980	1.07	0.81	1.43
<i>ITGB3</i>	6.52E-01	0.980	1.07	0.80	1.42
<i>MGMT</i>	7.03E-01	0.980	1.06	0.79	1.42
<i>DPYD</i>	7.13E-01	0.980	0.95	0.71	1.26
<i>TYMS</i>	7.23E-01	0.980	0.95	0.71	1.27
<i>PLAU</i>	7.79E-01	0.980	0.96	0.72	1.28
<i>RRM1</i>	8.11E-01	0.980	1.04	0.78	1.38
<i>TOP2A</i>	8.72E-01	0.980	1.02	0.77	1.37
<i>BCL2L11</i>	9.43E-01	0.980	0.99	0.68	1.42
<i>VCAM1</i>	9.57E-01	0.980	1.01	0.76	1.34
<i>RUNX3</i>	9.57E-01	0.980	0.99	0.74	1.33
<i>MLH1</i>	9.70E-01	0.980	1.01	0.75	1.36
<i>BAX</i>	9.80E-01	0.980	1.00	0.75	1.34

BH-FDR_P : Benjamini & Hochberg false discovery rate

Table S6 Univariate analysis of RFS (44 genes screened by LDA on publicly available dataset; GSE26253)

Gene	Hazard Ratio	HR: 95%CI-low	HR: 95%CI-high	Log-Rank P	FDR P	3-yr RFS (Low-group)	3-yr RFS (High-group)
<i>SPARC</i>	1.816	1.255	2.629	0.001	0.058	76.3	59.9
<i>EZH2</i>	0.628	0.436	0.906	0.012	0.262	62.2	73.8
<i>IGF1R</i>	1.489	1.037	2.139	0.030	0.336	74.6	61.3
<i>E2F1</i>	0.671	0.466	0.966	0.031	0.336	65.0	71.1
<i>RUNX3</i>	0.711	0.495	1.020	0.063	0.414	65.9	70.0
<i>DHFR</i>	1.397	0.974	2.004	0.067	0.414	72.8	63.0
<i>RRM2</i>	0.720	0.502	1.035	0.074	0.414	62.6	73.6
<i>PTGS2</i>	1.388	0.965	1.995	0.075	0.414	71.0	65.1
<i>DUT</i>	1.353	0.943	1.942	0.099	0.485	71.5	64.5
<i>ABCC1</i>	0.751	0.524	1.078	0.119	0.525	65.4	70.6
<i>MTHFR</i>	1.311	0.915	1.880	0.138	0.542	70.3	65.5
<i>VCAM1</i>	1.293	0.901	1.853	0.162	0.542	70.9	65.2
<i>REG4</i>	0.779	0.544	1.117	0.173	0.542	64.6	71.4
<i>FAS</i>	1.272	0.887	1.824	0.190	0.542	72.4	63.7
<i>VEGFA</i>	1.253	0.875	1.794	0.217	0.542	73.1	62.8
<i>GZMA</i>	0.799	0.557	1.145	0.220	0.542	64.6	71.6
<i>ANGPT2</i>	1.250	0.873	1.790	0.222	0.542	71.5	64.5
<i>FPGS</i>	0.800	0.558	1.146	0.222	0.542	63.3	72.8
<i>TOP2A</i>	0.813	0.567	1.165	0.258	0.598	64.8	71.4
<i>PLA2G2A</i>	0.825	0.576	1.181	0.292	0.618	67.3	68.6
<i>ERCC1</i>	1.209	0.844	1.731	0.299	0.618	71.6	64.5
<i>PLAU</i>	1.204	0.841	1.722	0.309	0.618	71.8	64.1
<i>LRP5</i>	0.835	0.583	1.197	0.325	0.622	66.6	69.5
<i>DAPK1</i>	1.168	0.816	1.672	0.396	0.726	70.5	65.5
<i>UPP1</i>	0.871	0.608	1.246	0.449	0.737	65.4	70.5
<i>MGMT</i>	1.148	0.802	1.643	0.450	0.737	69.5	66.5
<i>LDHA</i>	0.872	0.609	1.249	0.454	0.737	66.5	69.5
<i>ITGB3</i>	1.141	0.797	1.634	0.469	0.737	69.5	66.5
<i>TYMS</i>	0.891	0.622	1.274	0.526	0.764	63.8	72.3
<i>CAV1</i>	1.117	0.781	1.600	0.543	0.764	69.2	66.8
<i>BCL2L11</i>	1.115	0.779	1.595	0.552	0.764	72.7	63.2
<i>PTEN</i>	1.114	0.778	1.594	0.556	0.764	69.6	66.4
<i>DPYD</i>	1.106	0.773	1.583	0.581	0.771	67.7	68.3
<i>PECAM1</i>	1.102	0.770	1.577	0.596	0.771	68.7	67.3
<i>BCL2</i>	0.945	0.661	1.352	0.757	0.926	66.5	69.5
<i>ERBB2</i>	1.058	0.740	1.514	0.757	0.926	68.4	67.6
<i>EGFR</i>	0.968	0.677	1.385	0.861	0.973	65.6	70.4
<i>GADD45A</i>	1.030	0.720	1.474	0.871	0.973	66.8	69.1
<i>HDAC1</i>	1.027	0.718	1.469	0.884	0.973	70.2	65.8
<i>THBS1</i>	1.020	0.713	1.460	0.913	0.973	67.0	69.0
<i>GGH</i>	1.015	0.710	1.452	0.934	0.973	69.0	67.0
<i>MLH1</i>	1.010	0.706	1.444	0.958	0.973	69.8	66.1
<i>BAX</i>	1.007	0.704	1.441	0.968	0.973	68.4	67.6
<i>RRM1</i>	0.994	0.695	1.421	0.973	0.973	66.4	69.6