

Supplementary Information 1: Cell culture and maintenance

The SKOV-3 cells were procured from the American Type Culture Collection (ATCC) (ATCC Catalogue no. HTB-77). SKOV-3 cells were cultured in the recommended McCoy's 5A medium (Gibco Catalogue no. 16600082) with 10% Fetal Bovine Serum (FBS) (Gibco Catalogue no. 10270106) and 1% penicillin-streptomycin (Gibco Catalogue no. 15240062). The McCoy's 5A medium contains 1.5 mM L-glutamine and 2200 mg/L sodium bicarbonate.

A2780 cells were procured from the European Collection of Authenticated Cell Cultures (ECACC) (ECACC Catalogue no. 93112519). A2780 cells were cultured in the recommended Roswell Park Memorial Institute (RPMI) 1640 Medium (Gibco Catalogue no. A10491-01) with 10% FBS (Gibco Catalogue no. 10270106), 1% penicillin-streptomycin (Gibco Catalogue no. 15240062).

Cells in passages 3 to 8 were used for all studies. Both A2780 and SKOV-3 cells were periodically checked for mycoplasma using a mycoplasma detection kit (Lonza).

For the 2D adherent cell culture, 1×10^6 cells were seeded in petri dishes. Cells were cultured and maintained at 37°C and 5% CO₂ incubator.

Supplementary Information 2: Spheroid formation

For the 3D spheroids culture, 2×10^6 cells were seeded in the ultra-low attachment Petri dishes (Corning CLS3471) with CSC-specific media containing knockout DMEM/F12 medium (Catalog number 12660012), 1% L-glutamine (Gibco 2503008), 20% knockout serum replacement (Life Technologies Catalog number 10828010), and 20 ng/mL EGF (R&D Systems 236-EG), 10 ng/mL bFGF (R&D Systems 4114-TC). Spheroids were cultured for 5 days.

Cells in passages 3 to 8 were used for all studies. The mycoplasma contamination of cells was screened periodically by using Mycoplasma Detection Kit (Lonza).

Spheroids were imaged using the Olympus inverted microscope. Spheroids were treated with DMSO (Avra ASD2004) (control) and mDivi-1 (Sigma M0199) (20 μM) for 24 hours. Both A2780 and SKOV-3 cells were periodically checked for mycoplasma using a mycoplasma detection kit (Lonza).

Supplementary Information 3: Source and authentication details for cell lines to prevent variability.

SKOV-3 cells are procured from the American Type Culture Collection (ATCC). SKOV-3 is a cell line with epithelial morphology isolated from the ovary of a 64-year-old, White female with ovarian adenocarcinoma (ATCC website).

STR profiling (from ATCC website):

Amelogenin: X
CSF1PO: 11
D13S317: 8,11
D16S539: 12
D5S818: 11
D7S820: 13,14
TH01: 9,9.3
TPOX: 8,11
vWA: 17,18
D3S1358: 14
D21S11: 30,31.2
D18S51: 16,17
Penta_E: 5,13
Penta_D: 12,13
D8S1179: 14,15

FGA: 23,24,25
D19S433: 14,14.2
D2S1338: 18,23

A2780 cells were procured from the European Collection of Authenticated Cell Cultures (ECACC). A2780 is an ovarian cancer cell line that was established from an Ovarian endometroid adenocarcinoma tumour in an untreated patient. The cell line has an epithelial morphology.

DNA Profile:
STR-PCR Data:

Amelogenin: X
CSF1PO: 10,11
D13S317: 12,13
D16S539: 11,13
D5S818: 11,12
D7S820: 10
THO1: 6
TPOX: 8,10
vWA: 15,16

(Ref: <https://www.culturecollections.org.uk/products/cell-cultures/ecacc-cell-line-profiles/a2780/>)

Supplementary information 4: Survival analysis using Kaplan-Meier plotter

Link for KM Plotter: (<https://kmplot.com/analysis/index.php?p=service&cancer=ovar>)

Supplementary Information 5: Cohort information for the survival plots given in the Figure no:6

Figure (6Ai) GCSH Affy ID: 213129_s_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
21	18

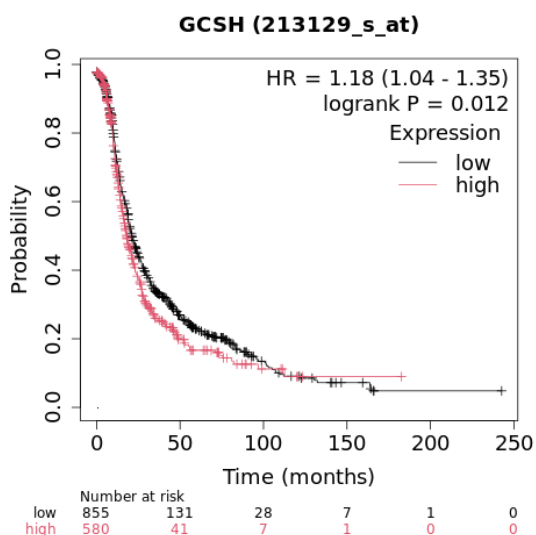


Figure (6 Aii) GCSH Affy ID: 213129_s_at (Chemotherapy: contains platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
20.27	17

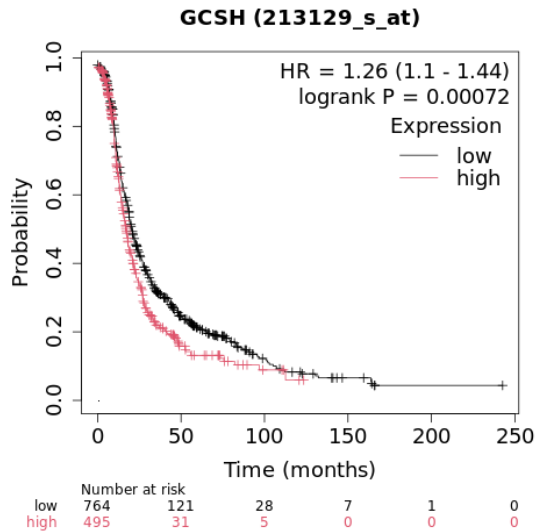


Figure 6 (Bi) DFFA Affy ID: 203277_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
20.27	17

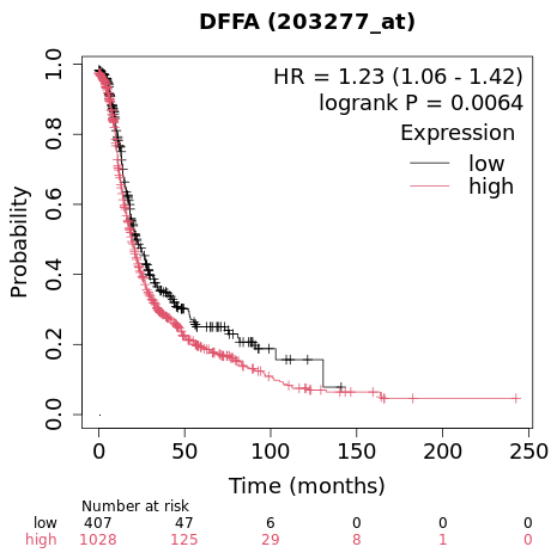


Figure (6Bii) DFFA

Affy ID: 203277_at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
18.43	16.13

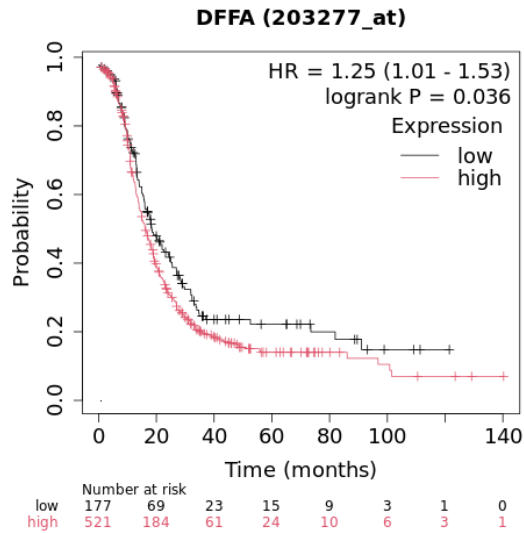


Figure (6 Ci) RCN1 Affy ID: 201063_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
18	21.03

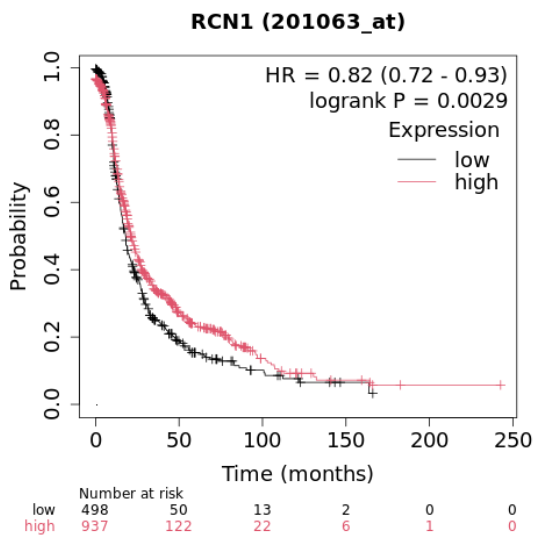


Figure (6 Cii) RCN1

Affy ID: 201063_at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
15.33	18.3

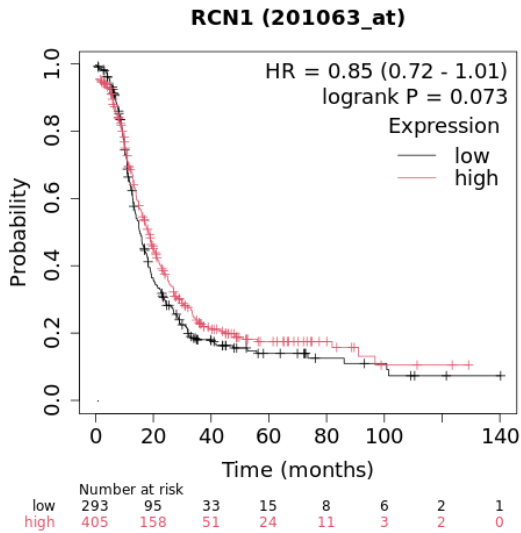


Figure 6 (Di) CNPY2

Affy ID: 209796_s_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
21	18.23

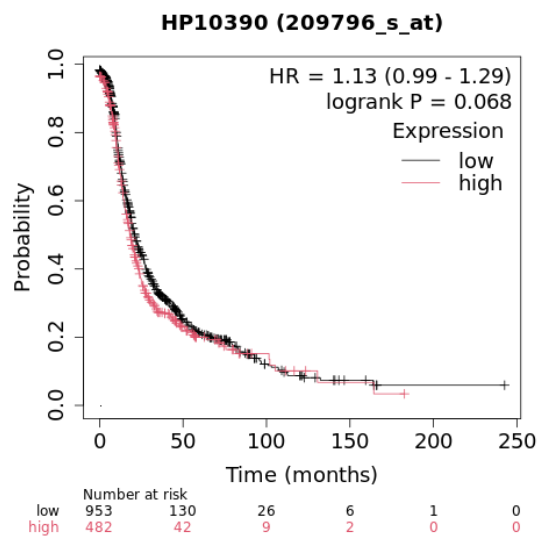


Figure 6 (Dii) CNPY2

Affy ID: 209796_s_at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
14.37	18

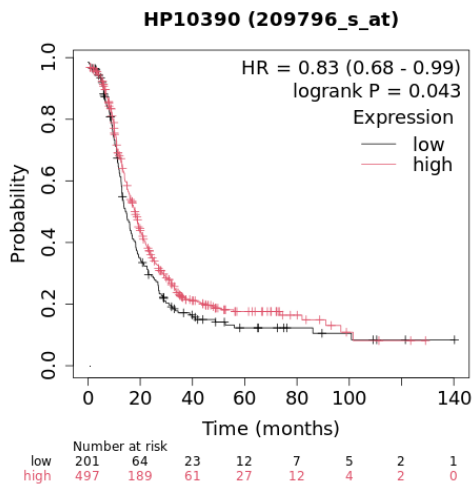


Figure 6 (E1) RPLP1

Affy ID: 200763_s_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
18.23	23

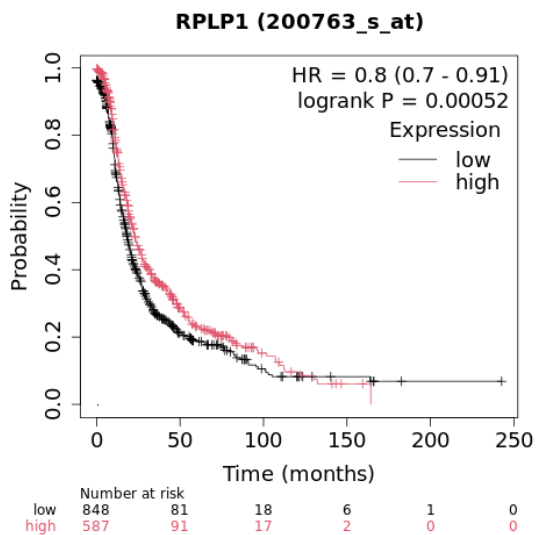
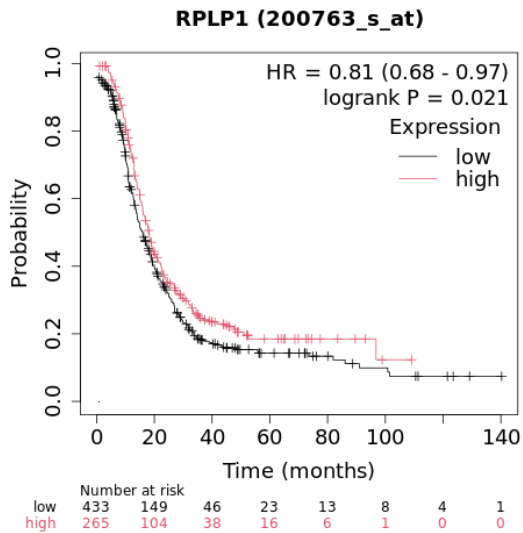


Figure 6 (Eii) RPLP1**Affy ID: 200763_s_at (Chemotherapy: contains taxol + platin)**

Median Survival

Low expression cohort (months)	High expression cohort (months)
16	18.1

**Figure 6 (Fi) APOC-3****Affy ID: 205820_s_at**

Median Survival

Low expression cohort (months)	High expression cohort (months)
18.3	24.1

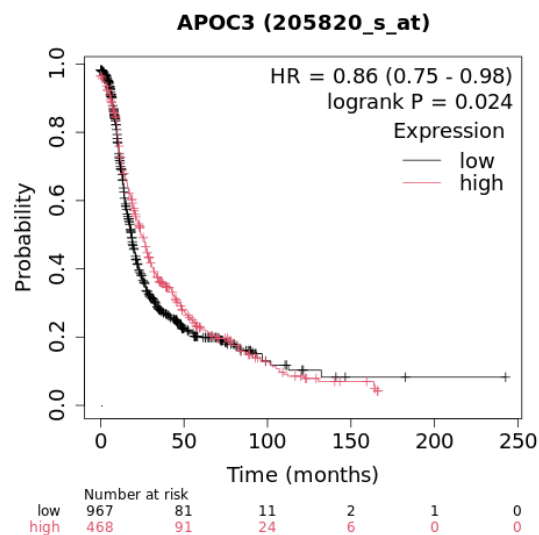


Figure 6 (Fii) APOC-3 Affy ID:205820_s_at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
18.23	16

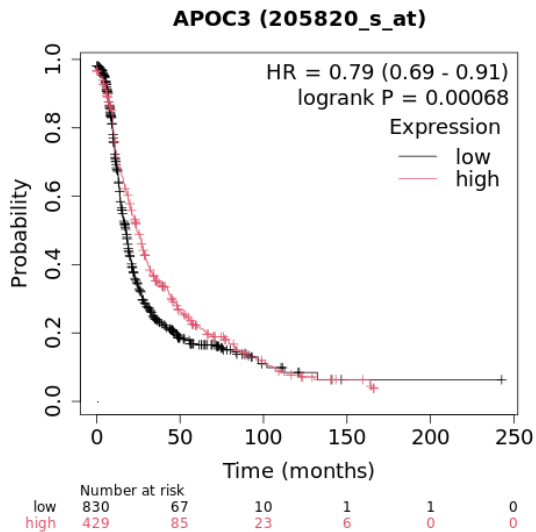


Figure 6 (Gi) HNRNPL Affy ID: 35201_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
18.23	26.52

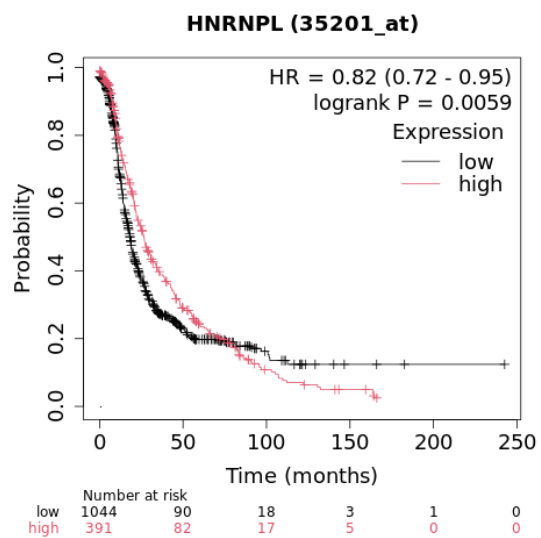


Figure 6 (Gii) HNRNPL Affy ID:35201_at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
18	16.6

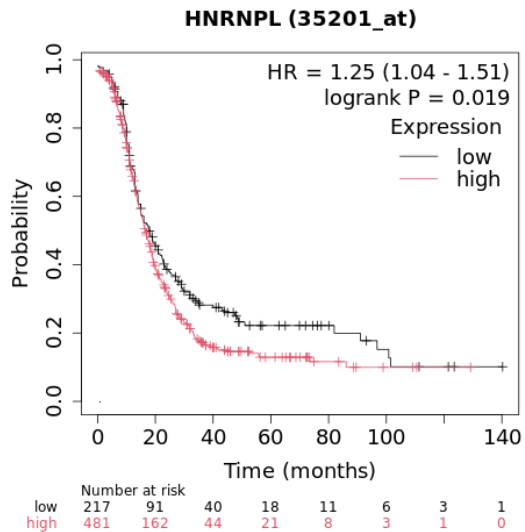


Figure 6 (Hi) PPP1R14B Affy ID: 212680_x_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
19	22.24

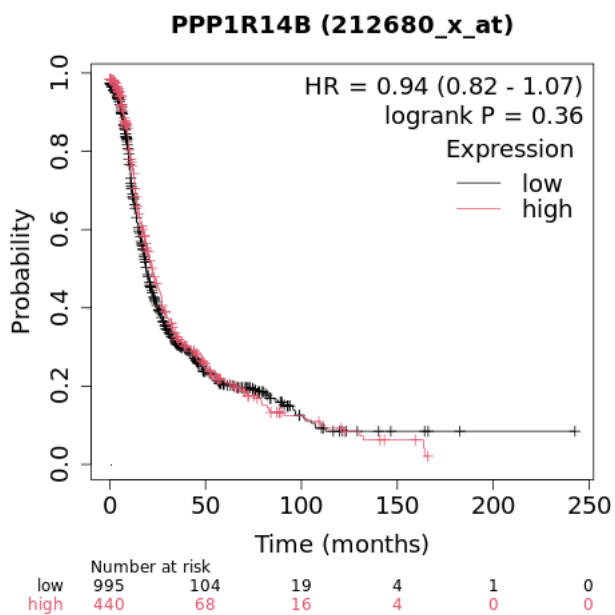
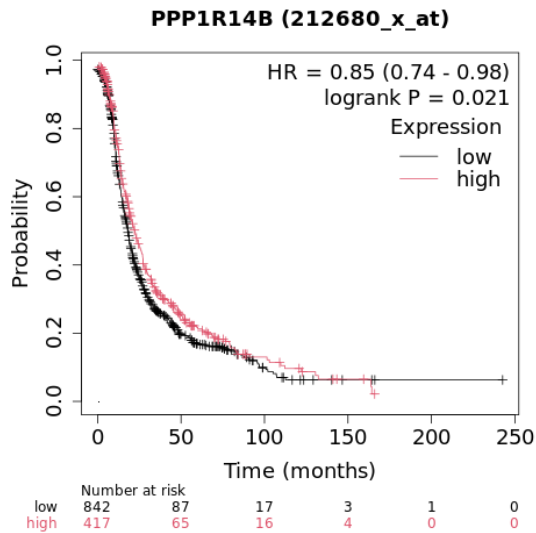


Figure 6 (Hii) PPP1R14B Affy ID: 212680_x_at (Chemotherapy: contains platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
18.1	22.24



6 (li) ANP32A Affy ID: 201038_s_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
18.3	21.13

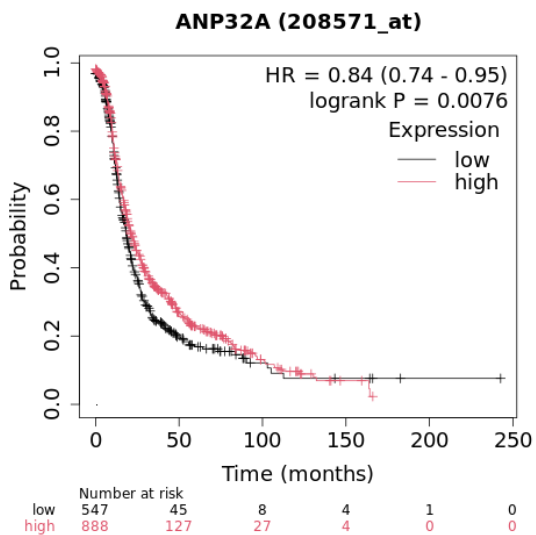
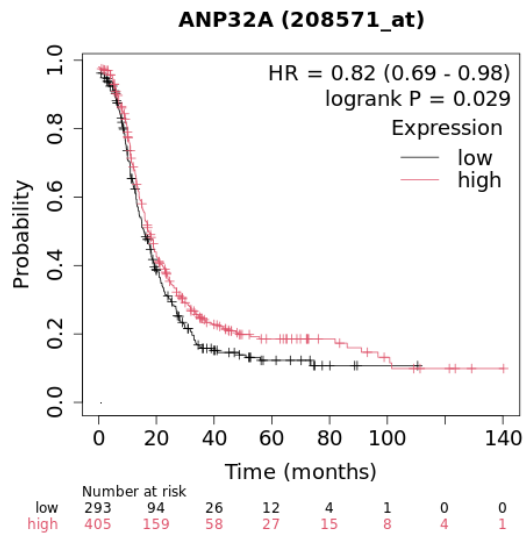


Figure 6 (Iii) ANP32A

Affy ID: 201038_s_at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
15.67	17.38



Supplementary Information 6: Cohort information for the survival plots given in figure no:7

Figure (7Ai) RPL3 Affy ID: 201217_X-at

Median Survival

Low expression cohort (months)	High expression cohort (months)
18.87	26.28

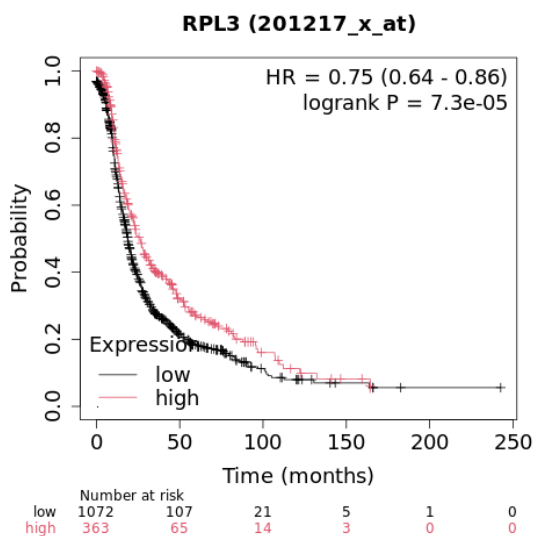


Figure 7 (Aii) RPL3 Affy ID: 201217_X-at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
16	17.67

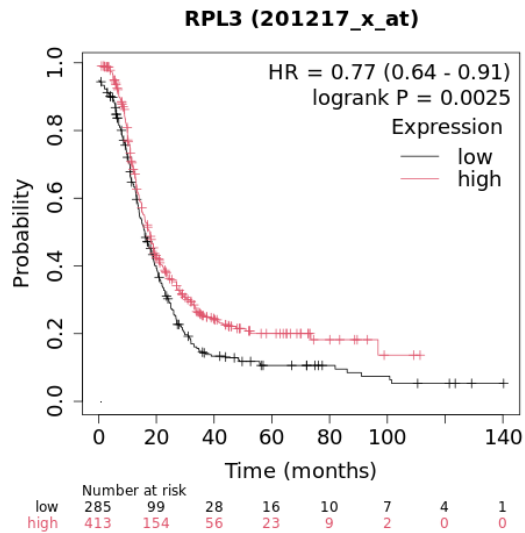


Figure 7 (Bi) RPL10A Affy ID: 229563_s_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
12.23	19.19

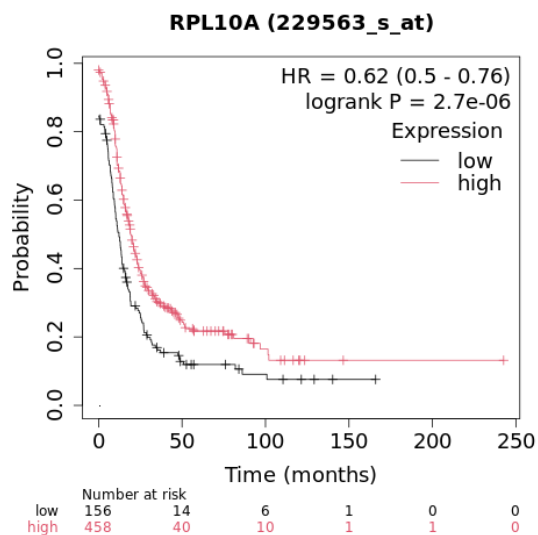


Figure 7 (Bii) RPL10A Affy ID: 229563_s_at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
12.23	19.19

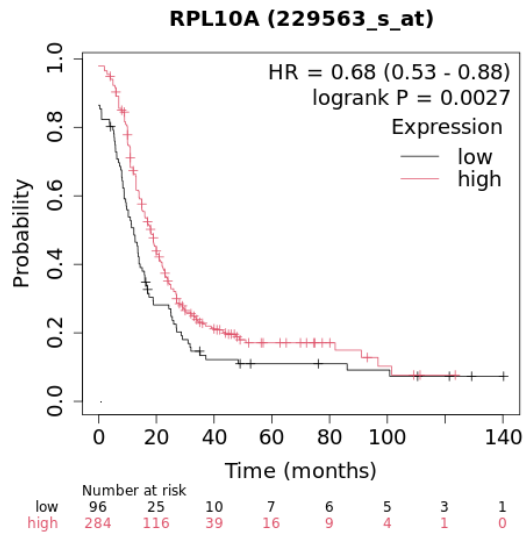


Figure 7 (Ci) RPL18 Affy ID: 200022_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
18	20.6

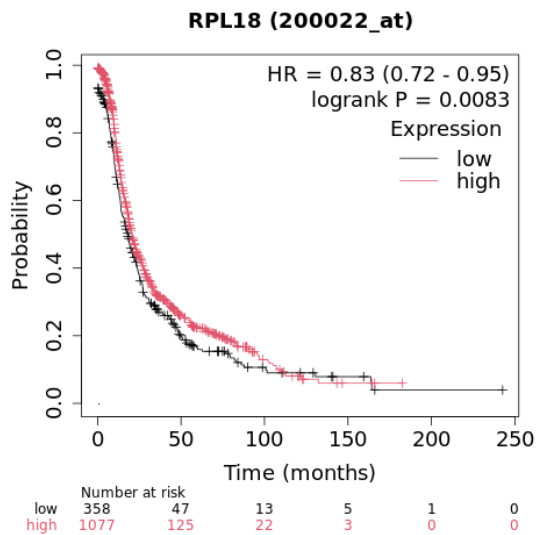


Figure 7 (Ci) RPL18

Affy ID: 200022_at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
14	17.9

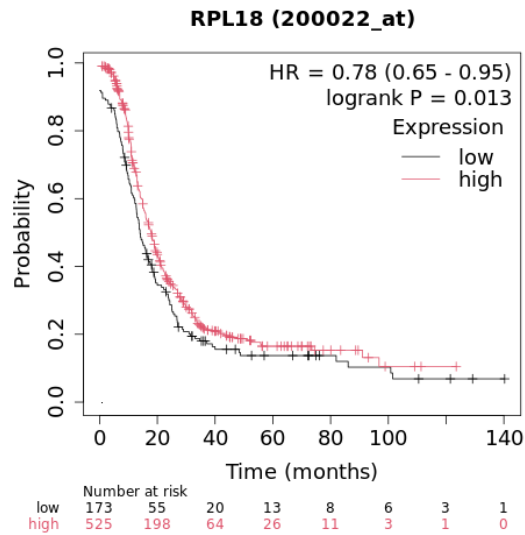


Figure 7 (Di) MRPL17

Affy ID: 222216_s_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
19	22.27

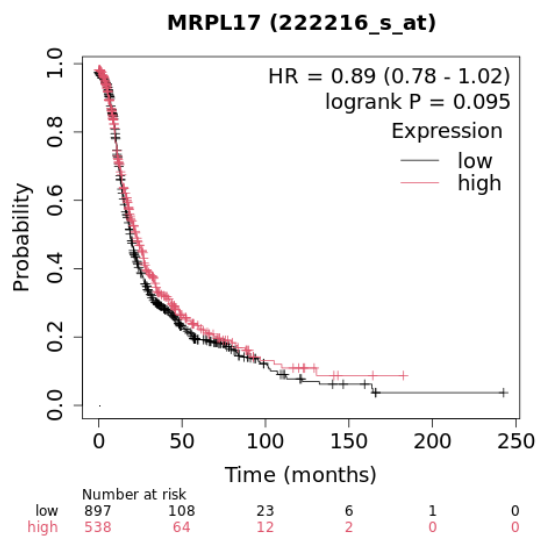


Figure 7 (Di) MRPL17

Affy ID:222216_s_at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
16.07	19

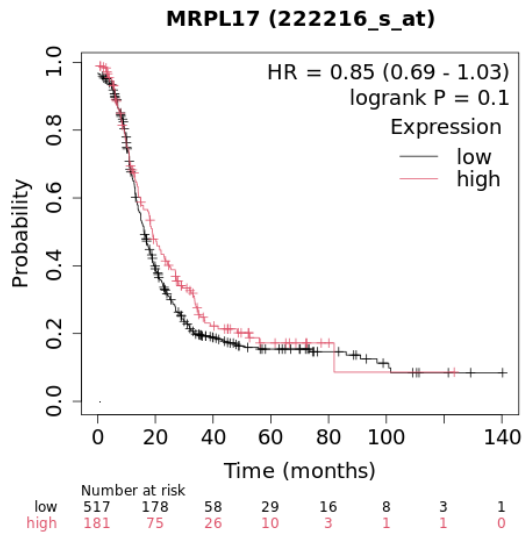


Figure 7 (Ei) RPL7A

Affy ID: 217740_x_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
18	22.67

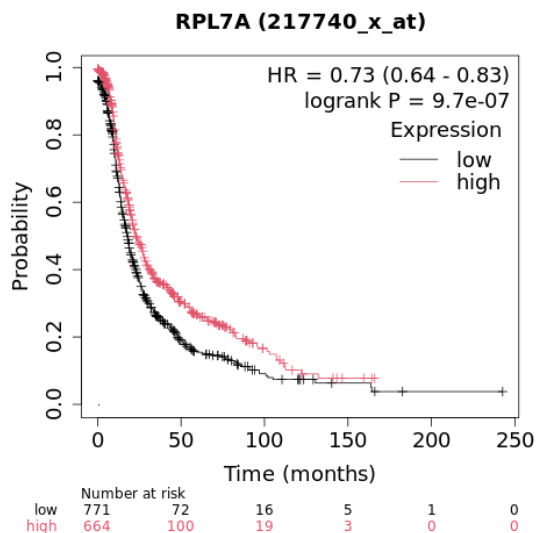


Figure 7 (Eii) RPL7AAffy ID: 217740_x_at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
16	19.09

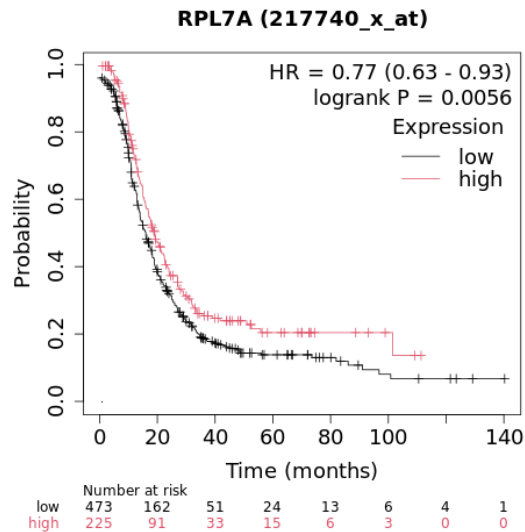


Figure 7 (Fi) RPS16

Affy ID: 226131_s_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
16	19.09

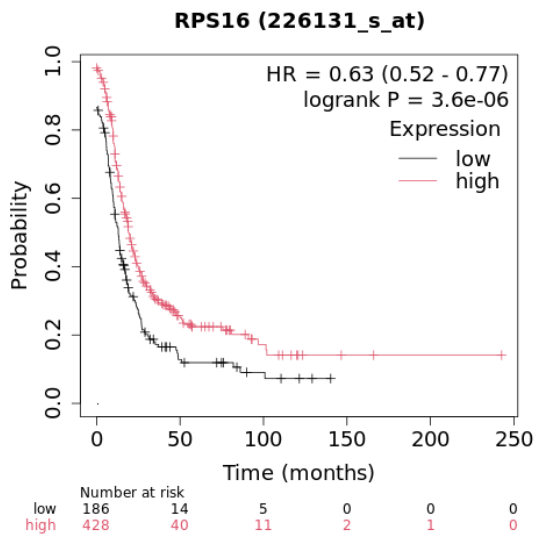


Figure 7 (Fi) RPS16

Affy ID: 226131_s_at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
12.23	18

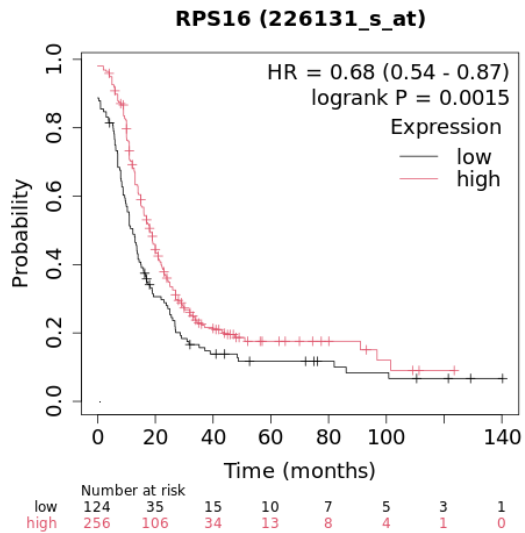


Figure 7 (Gi) RPL6 Affy ID: 200034_s_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
22.13	19.09

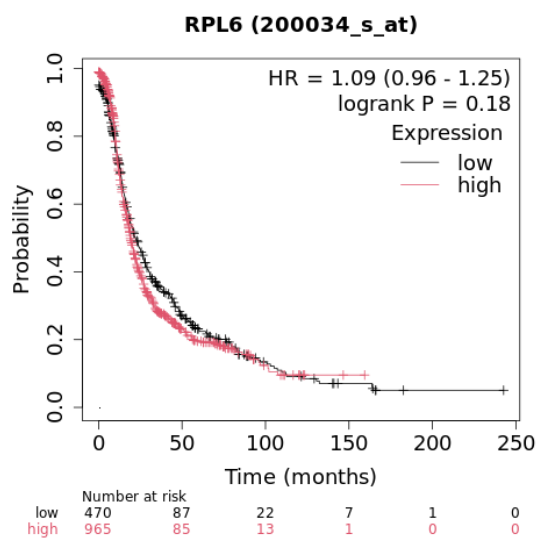


Figure 7 (Gi) RPL6 Affy ID: 200034_s_at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
15.93	18.1

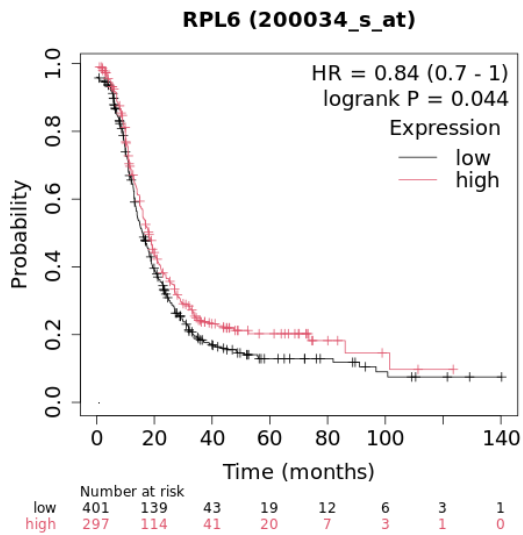


Figure 7 (Hi) NIPSNAP1 Affy ID: 201708_s_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
21	18.93

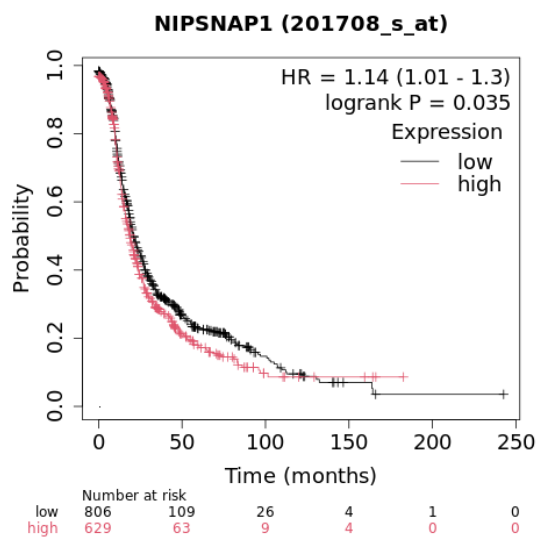


Figure 7 (Hi) NIPSNAP1 Affy ID: 201708_s_at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
15	17.53

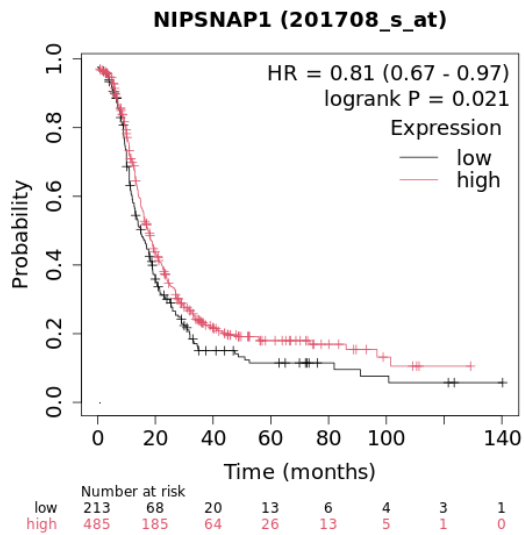


Figure 7 (li) PHB2 Affy ID: 201600_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
19.3	22.02

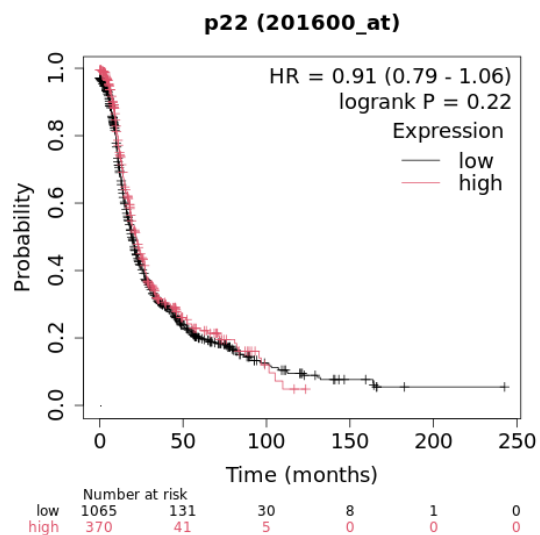


Figure 7 (lii) PHB2 Affy ID: 201600_at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
15.87	19

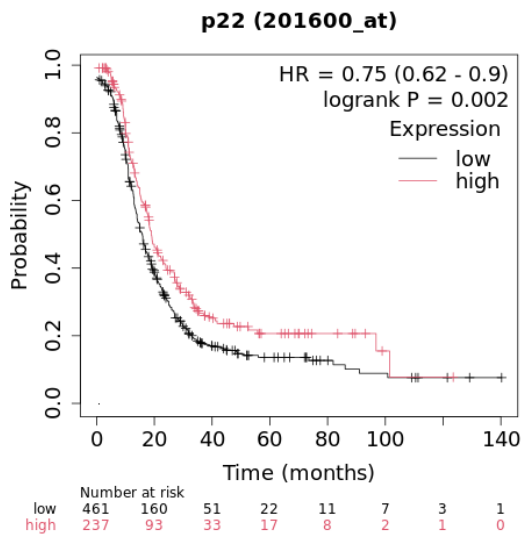


Figure 7 (Ji) PGAM1

Affy ID: 200886_s_at

Median Survival

Low expression cohort (months)	High expression cohort (months)
21.77	18.3

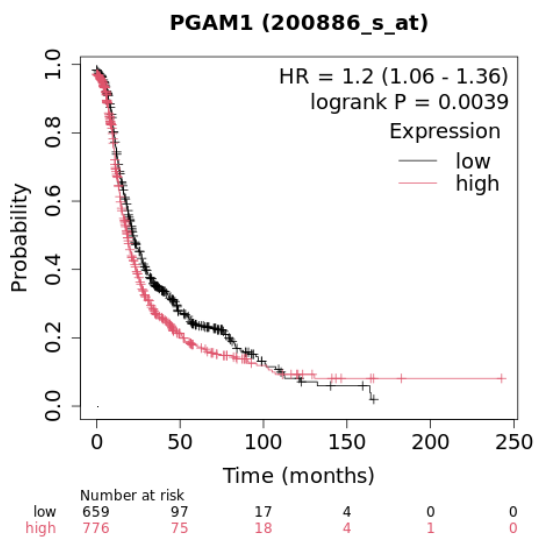


Figure 7 (Ji) PGAM1

Affy ID: 200886_s_at (Chemotherapy: contains taxol + platin)

Median Survival

Low expression cohort (months)	High expression cohort (months)
17.68	15.1

