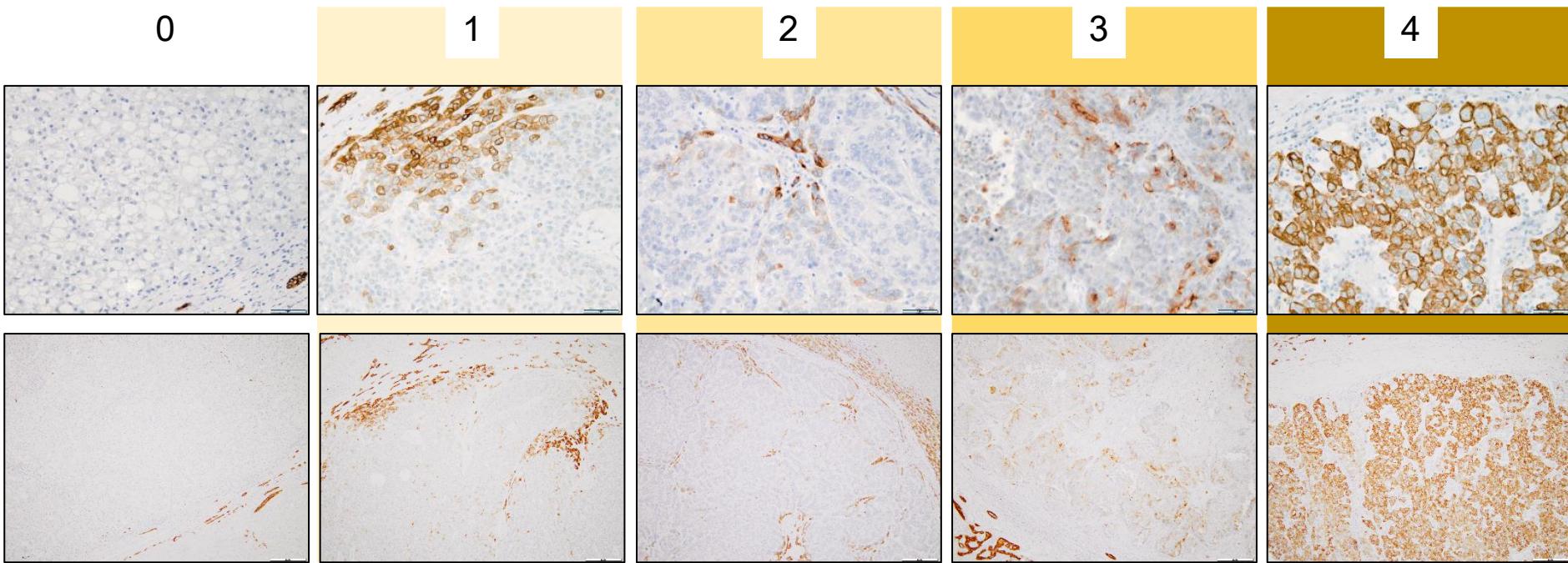
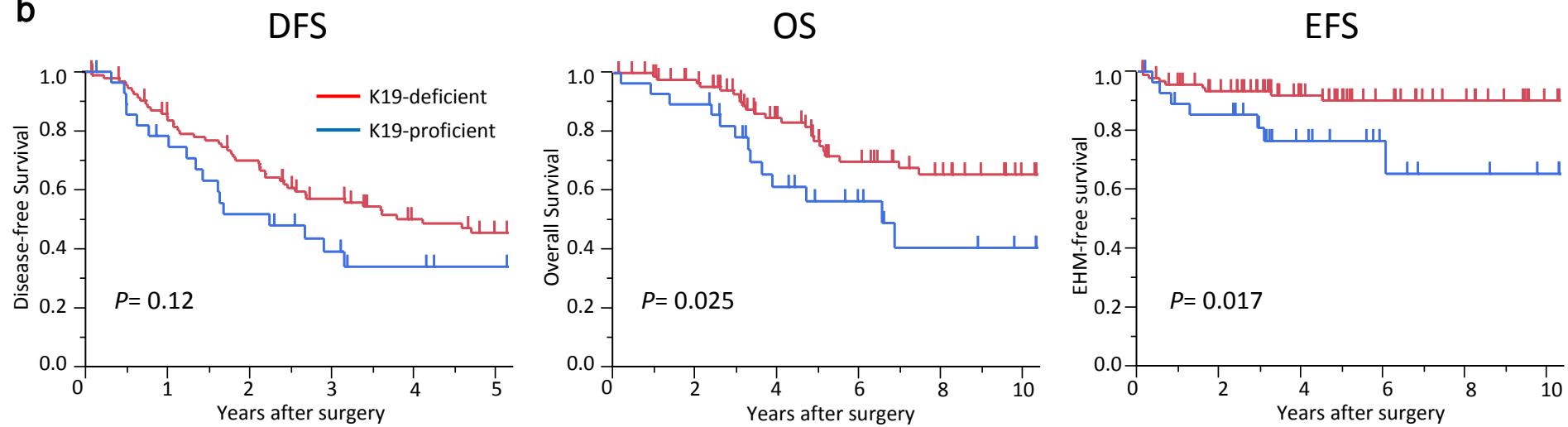
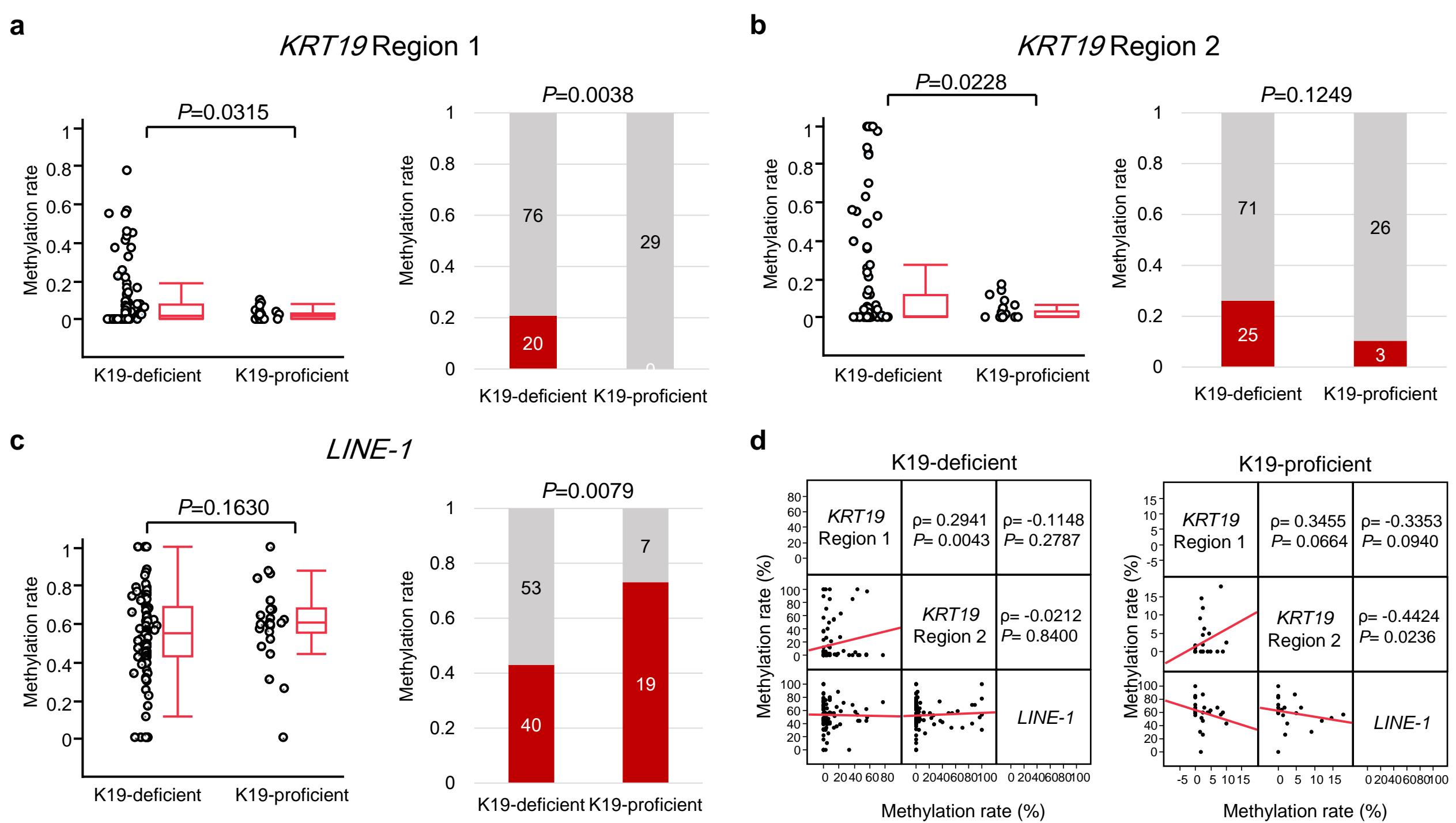


Surgically resected and metastatic HCCs
from January 2000 to December 2010 (n=564)

- Recurrent HCC (n=119)
- Major vascular invasion (T3b*, n=57)
- Rupture or Invasion to other organs (T4*, n=18)
- Lymph node or distant metastasis (N1 or M1*, n=23)
- Combined hepatocellular cholangiocarcinoma (n=7)
- Received pre-operative therapy (n=252)
- Non-curative resection without metastasis (n=9)
- Transplantation (n=13)
- Insufficient clinical record (n=18)

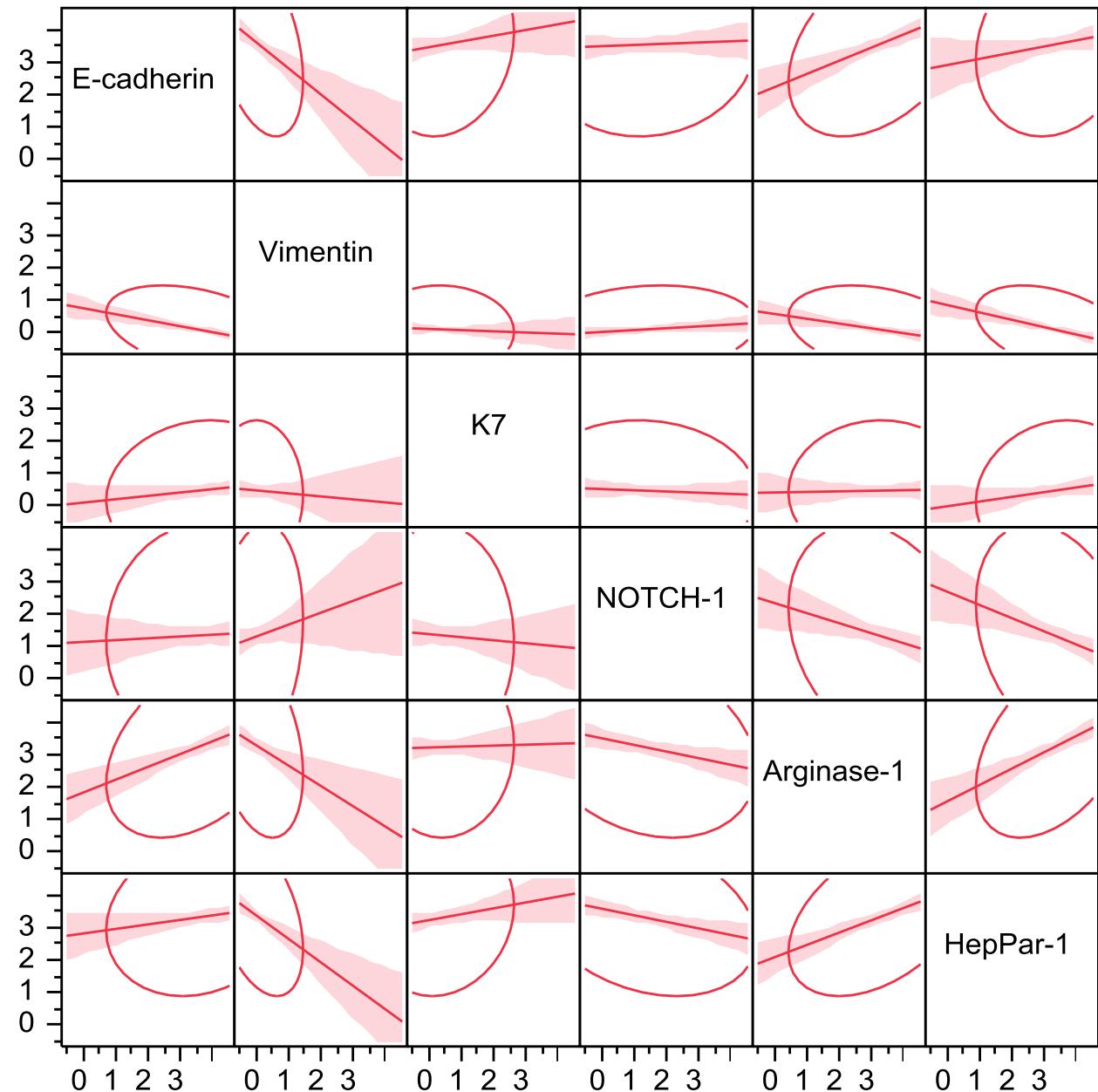
Matched for the criteria (n=125)

a**b**



a

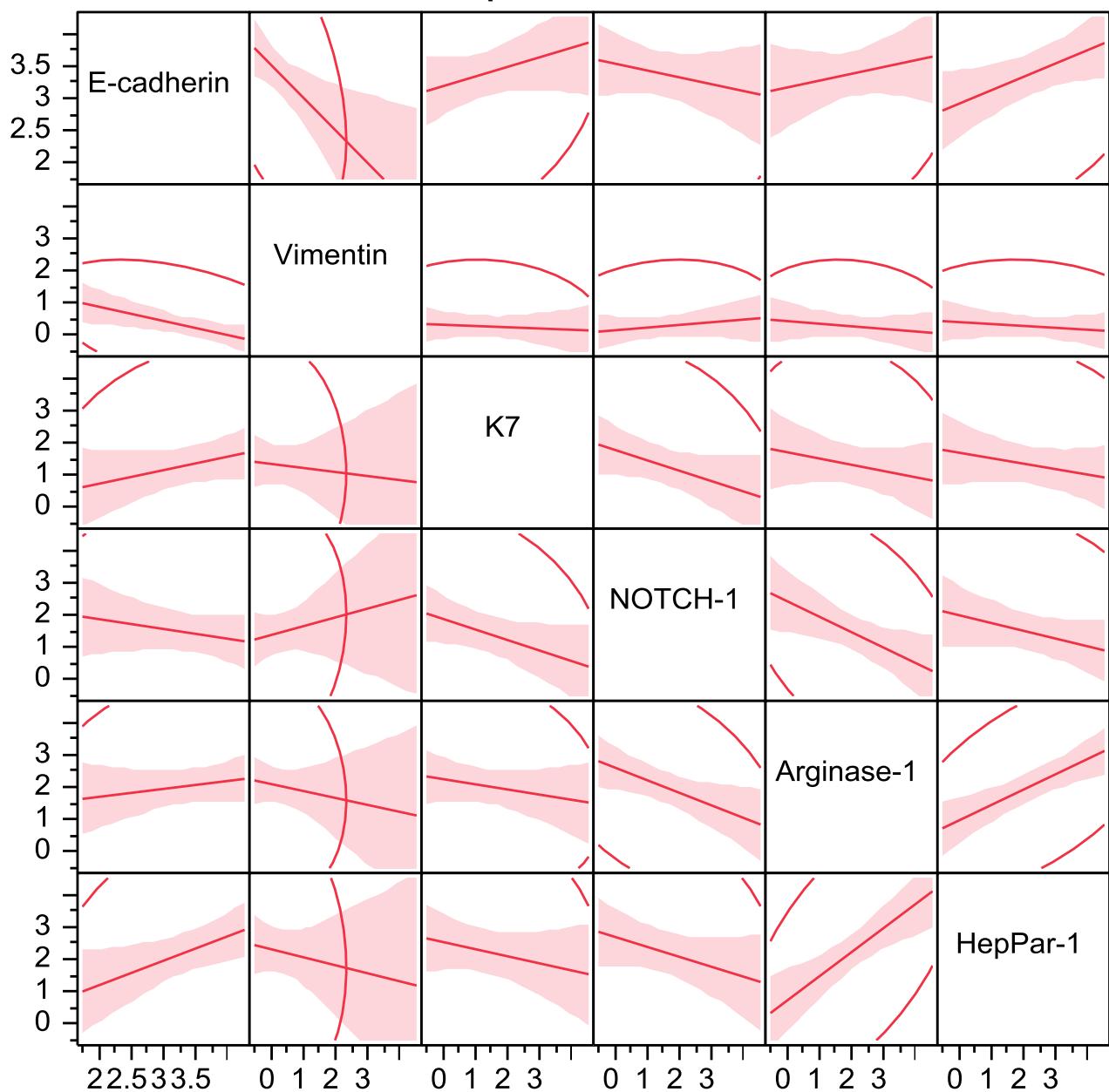
K19-deficient HCCs



Variable	Spearman (ρ)	P value
HepPar-1 vs Vimentin	-0.3248	0.0012
HepPar-1 vs NOTCH-1	-0.2979	0.0032
Arginase-1 vs Vimentin	-0.2787	0.006
Arginase-1 vs NOTCH-1	-0.274	0.0069
Vimentin vs E-cadherin	-0.2128	0.0374
K7 vs Vimentin	-0.0317	0.7594
NOTCH-1 vs K7	-0.0317	0.7593
NOTCH-1 vs E-cadherin	-0.0091	0.9298
Arginase-1 vs K7	0.0505	0.6251
HepPar-1 vs E-cadherin	0.0839	0.4162
K7 vs E-cadherin	0.1158	0.2612
HepPar-1 vs K7	0.197	0.0544
NOTCH-1 vs Vimentin	0.1988	0.0521
Arginase-1 vs E-cadherin	0.3038	0.0026
HepPar-1 vs Arginase-1	0.3794	0.0001

b

K19-proficient HCCs



Variable	Spearman (ρ)	P value
HepPar-1 vs Vimentin	-0.2951	0.1202
HepPar-1 vs NOTCH-1	-0.2651	0.1646
Arginase-1 vs Vimentin	-0.1913	0.3201
Arginase-1 vs NOTCH-1	-0.4079	0.028
Vimentin vs E-cadherin	-0.5325	0.0029
K7 vs Vimentin	-0.0978	0.6139
NOTCH-1 vs K7	-0.2944	0.1211
NOTCH-1 vs E-cadherin	-0.136	0.4819
Arginase-1 vs K7	-0.2944	0.1211
HepPar-1 vs E-cadherin	-0.1873	0.3306
K7 vs E-cadherin	0.2843	0.135
HepPar-1 vs K7	-0.2048	0.2866
NOTCH-1 vs Vimentin	0.3058	0.1066
Arginase-1 vs E-cadherin	0.151	0.4343
HepPar-1 vs Arginase-1	0.5981	0.0006