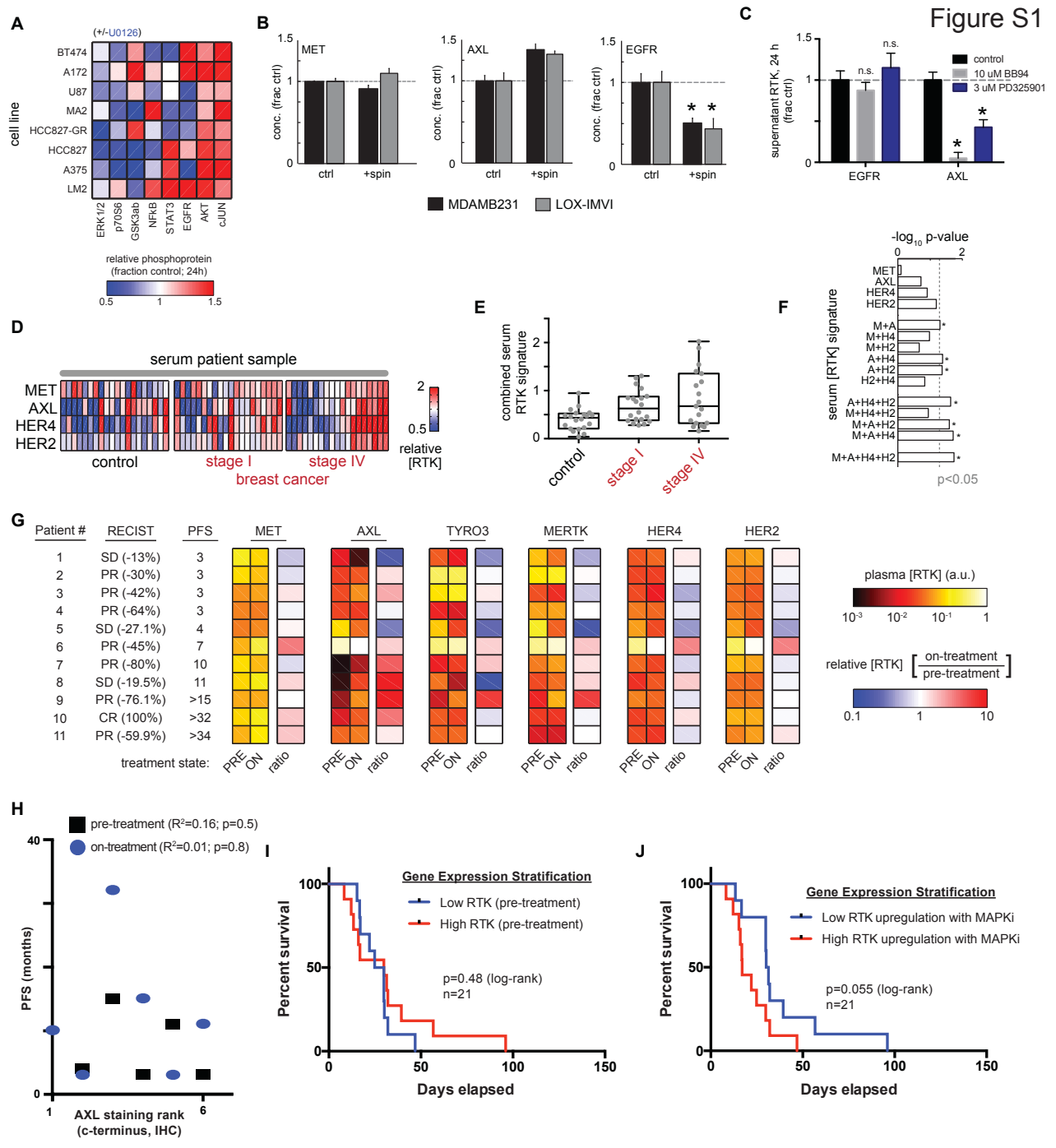
Figure S1
A
(+/-U0126)
cell line
BT474
A172
U87
MA2
HCC827-GR
HCC827
A375
LM2
ERK1/2
p70S6
GSK3ab
NFkB
STAT3
EGFR
AKT
cJUN
relative phosphoprotein
(fraction control; 24h)
0.5
1
1.5
B
MET
AXL
EGFR
conc. (frac ctrl)
ctrl
+spin
MDAMB231
LOX-IMVI
C
supernatant RTK, 24 h
(frac ctrl)
n.s.
control
10 uM BB94
3 uM PD325901
EGFR
AXL
D
serum patient sample
MET
AXL
HER4
HER2
control
stage I
stage IV
breast cancer
relative
[RTK]
E
combined serum
RTK signature
control
stage I
stage IV
F
-log10 p-value
serum [RTK] signature
MET
AXL
HER4
HER2
M+A
M+H4
M+H2
A+H4
A+H2
H2+H4
A+H4+H2
M+H4+H2
M+A+H2
M+A+H4
M+A+H4+H2
p<0.05
G
Patient #
RECIST
PFS
1 SD (-13%) 3
2 PR (-30%) 3
3 PR (-42%) 3
4 PR (-64%) 3
5 SD (-27.1%) 4
6 PR (-45%) 7
7 PR (-80%) 10
8 SD (-19.5%) 11
9 PR (-76.1%) >15
10 CR (100%) >32
11 PR (-59.9%) >34
MET
AXL
TYRO3
MERTK
HER4
HER2
treatment state:
PRE
ON
ratio
plasma [RTK] (a.u.)
relative [RTK]
on-treatment
pre-treatment
0.1
1
10
H
pre-treatment (R2=0.16; p=0.5)
on-treatment (R2=0.01; p=0.8)
PFS (months)
AXL staining rank
(c-terminus, IHC)
I
Gene Expression Stratification
Low RTK (pre-treatment)
High RTK (pre-treatment)
p=0.48 (log-rank)
n=21
Percent survival
Days elapsed
J
Gene Expression Stratification
Low RTK upregulation with MAPKi
High RTK upregulation with MAPKi
p=0.055 (log-rank)
n=21
Percent survival
Days elapsed