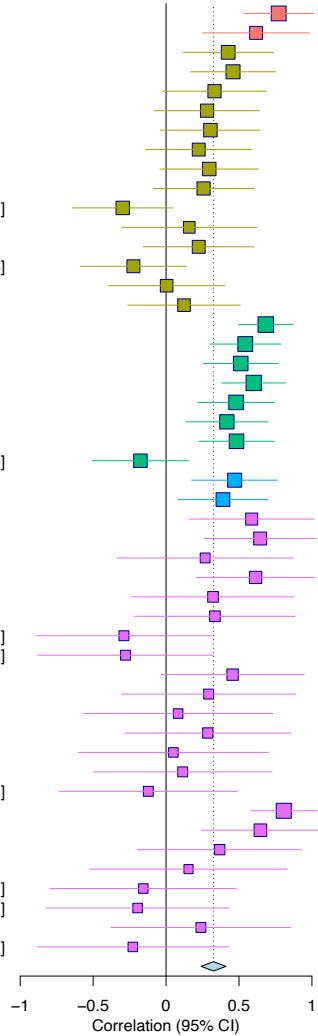


SCLC

drug	COR (95%CI)
PD-0325901	0.77 [0.53; 1.01]
AZD6244	0.62 [0.25; 0.98]
selumetinib:PLX-4032 (8:1 mol/mol)	0.43 [0.12; 0.73]
selumetinib:GDC-0941 (4:1 mol/mol)	0.46 [0.17; 0.75]
selumetinib:MK-2206 (8:1 mol/mol)	0.33 [-0.02; 0.69]
selumetinib:UNC0638 (4:1 mol/mol)	0.28 [-0.08; 0.64]
PD-318088	0.30 [-0.04; 0.65]
selumetinib:BRD-A02303741 (4:1 mol/mol)	0.22 [-0.14; 0.59]
AZD6244	0.30 [-0.04; 0.63]
selumetinib:tretinoin (2:1 mol/mol)	0.26 [-0.09; 0.60]
selumetinib:navitoclax (8:1 mol/mol)	-0.30 [-0.64; 0.05]
GSK1120212	0.16 [-0.30; 0.62]
selumetinib:JQ-1 (4:1 mol/mol)	0.22 [-0.16; 0.60]
selumetinib:piperlongumine (8:1 mol/mol)	-0.22 [-0.59; 0.14]
selumetinib:vorinostat (8:1 mol/mol)	0.00 [-0.40; 0.40]
selumetinib:decitabine (4:1 mol/mol)	0.12 [-0.26; 0.51]
BAY 869766 (2)	0.68 [0.50; 0.87]
GSK1120212	0.54 [0.30; 0.79]
AZD6244 (2)	0.51 [0.26; 0.77]
PD-184352	0.60 [0.38; 0.82]
PD-0325901	0.48 [0.22; 0.74]
BAY 869766 (1)	0.42 [0.14; 0.70]
BIX 02189	0.48 [0.23; 0.74]
AZD6244 (1)	-0.18 [-0.51; 0.15]
GSK1120212	0.47 [0.18; 0.76]
PD-0325901	0.39 [0.08; 0.70]
PD-0325901	0.59 [0.16; 1.02]
PD-198306	0.64 [0.26; 1.03]
GSK1120212	0.27 [-0.34; 0.87]
Ro-4987655	0.61 [0.21; 1.02]
AZD6244	0.32 [-0.23; 0.88]
AZD8330	0.34 [-0.22; 0.89]
U-0124	-0.29 [-0.89; 0.31]
nobiletin	-0.28 [-0.88; 0.32]
TAK-733	0.46 [-0.03; 0.95]
MEK162	0.29 [-0.31; 0.89]
MEK1-2-inhibitor	0.08 [-0.57; 0.73]
BIX 02189	0.29 [-0.28; 0.86]
BAY 869766	0.05 [-0.60; 0.70]
cobimetinib	0.11 [-0.50; 0.73]
arctigenin	-0.12 [-0.73; 0.49]
U-0126 (1)	0.81 [0.58; 1.03]
AS-703026	0.65 [0.24; 1.05]
PD-318088	0.37 [-0.20; 0.93]
U-0126 (2)	0.15 [-0.52; 0.83]
PD-98059	-0.16 [-0.79; 0.48]
BIX-02188 (1)	-0.20 [-0.82; 0.43]
PD-184352	0.24 [-0.38; 0.86]
BIX-02188 (2)	-0.23 [-0.88; 0.43]
Total	0.33 [0.24; 0.41]

Heterogeneity: $\chi^2_{48} = 119.04$ ($P < .001$), $I^2 = 60\%$



NBL

drug	COR (95%CI)
PD-0325901	0.62 [0.21; 1.02]
AZD6244	0.67 [0.30; 1.03]
selumetinib:PLX-4032 (8:1 mol/mol)	0.56 [0.16; 0.97]
selumetinib:GDC-0941 (4:1 mol/mol)	0.50 [0.10; 0.89]
selumetinib:MK-2206 (8:1 mol/mol)	0.55 [0.09; 1.01]
selumetinib:UNC0638 (4:1 mol/mol)	0.59 [0.19; 0.99]
PD-318088	0.47 [0.06; 0.88]
selumetinib:BRD-A02303741 (4:1 mol/mol)	0.62 [0.26; 0.98]
AZD6244	0.44 [0.00; 0.88]
selumetinib:tretinoin (2:1 mol/mol)	0.44 [-0.09; 0.97]
selumetinib:navitoclax (8:1 mol/mol)	-0.31 [-0.84; 0.23]
GSK1120212	0.48 [-0.05; 1.01]
selumetinib:JQ-1 (4:1 mol/mol)	0.26 [-0.25; 0.77]
selumetinib:piperlongumine (8:1 mol/mol)	-0.01 [-0.63; 0.61]
selumetinib:vorinostat (8:1 mol/mol)	-0.35 [-0.96; 0.25]
selumetinib:decitabine (4:1 mol/mol)	-0.31 [-0.84; 0.23]
BAY 869766 (2)	0.81 [0.56; 1.06]
GSK1120212	0.76 [0.51; 1.02]
AZD6244 (2)	0.73 [0.43; 1.04]
PD-184352	0.59 [0.20; 0.98]
PD-0325901	0.51 [0.07; 0.95]
BAY 869766 (1)	0.55 [0.13; 0.96]
BIX 02189	0.28 [-0.27; 0.82]
AZD6244 (1)	0.07 [-0.58; 0.72]
GSK1120212	0.58 [0.14; 1.01]
PD-0325901	0.50 [0.01; 0.99]
PD-0325901	0.69 [0.27; 1.11]
PD-198306	0.39 [-0.13; 0.92]
GSK1120212	0.70 [0.39; 1.02]
Ro-4987655	0.26 [-0.31; 0.84]
AZD6244	0.47 [-0.01; 0.95]
AZD8330	0.39 [-0.14; 0.91]
U-0124	-0.32 [-0.94; 0.29]
nobiletin	-0.33 [-0.95; 0.29]
TAK-733	0.18 [-0.49; 0.85]
MEK162	0.28 [-0.33; 0.88]
MEK1-2-inhibitor	0.73 [0.40; 1.05]
BIX 02189	0.19 [-0.48; 0.86]
BAY 869766	0.70 [0.33; 1.08]
cobimetinib	0.20 [-0.47; 0.86]
arctigenin	-0.11 [-0.79; 0.58]
U-0126 (1)	0.01 [-0.68; 0.70]
AS-703026	-0.01 [-0.70; 0.68]
PD-318088	-0.03 [-0.65; 0.59]
U-0126 (2)	-0.12 [-0.81; 0.56]
PD-98059	0.22 [-0.37; 0.81]
BIX-02188 (1)	0.32 [-0.24; 0.88]
PD-184352	-0.35 [-0.92; 0.22]
BIX-02188 (2)	0.37 [-0.22; 0.97]
Total	0.39 [0.30; 0.48]

Heterogeneity: $\chi^2_{48} = 90.53$ ($P < .001$), $I^2 = 47\%$

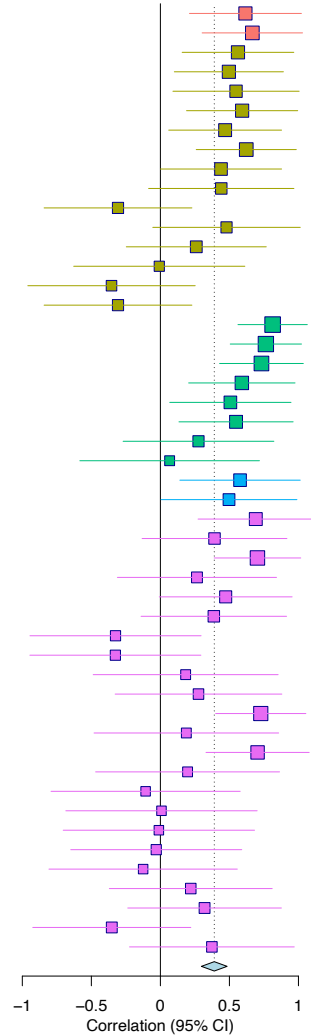


Figure S5. A meta-analysis example that summarizes the association between MEK inhibitor resistance and NE scores
 Compounds that target MEK were identified from five different datasets. Correlation between therapeutic sensitivity of different MEK inhibitors and NE scores in SCLC and NBL cell lines were computed. These forest plots visualize the meta-analyses of these correlations in SCLC (left) and NBL (right). Sources of data were annotated in different colors. Datasets have been harmonized such that a positive correlation indicates cell lines with higher NE scores are more resistant.