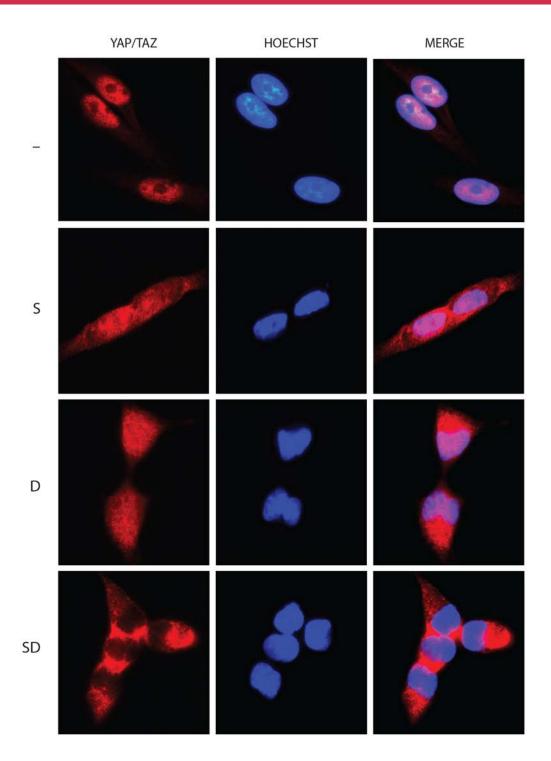
## **SUPPLEMENTARY FIGURES**

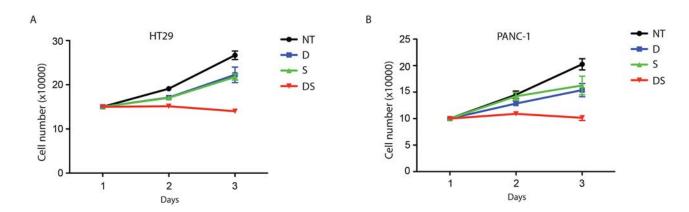
## **Enriched Drug Family**

| DRUG FAMILY                          | DRUGS IN<br>TOTAL | DRUGS WITH<br>SCORE > 0.3 | DRUGS WITH<br>SCORE > 0.6 | P-VALUE OF DRUGS<br>WITH SCORE > 0.3 | P-VALUE OF DRUGS<br>WITH SCORE > 0.6 |
|--------------------------------------|-------------------|---------------------------|---------------------------|--------------------------------------|--------------------------------------|
| Statin                               | 6                 | 6                         | 2                         | 0                                    | 0.00018                              |
| Imatinib analog                      | 24                | 5                         | 2                         | 0.00098                              | 0.00324                              |
| Quinone/Quinoline                    | 1220              | 67                        | 6                         | 4.0E-5                               | 0.26127                              |
| Sulfonate                            | 113               | 12                        | 1                         | 0.00037                              | 0.32914                              |
| Others                               | 49225             | 1505                      | 168                       | 1                                    | 0.9889                               |
| Nitrosureas cross-<br>linking agents | 8                 | 1                         | 0                         | 0.23534                              | 1                                    |
| Platinum complexes                   | 98                | 1                         | 0                         | 0.96274                              | 1                                    |
| Anthracyclines                       | 33                | 3                         | 0                         | 0.0941                               | 1                                    |
| Purine/Pirimidine<br>analogues       | 20                | 2                         | 0                         | 0.13987                              | 1                                    |
| Specific target<br>inhibitors        | 13                | 2                         | 0                         | 0.06665                              | 1                                    |
| Vinca alkaloides                     | 13                | 1                         | 0                         | 0.35341                              | 1                                    |

**Supplementary Figure S1: NF2 enrichment analysis.** The table lists the different drug families statistically significant on all CCLE cancer cell lines bearing a missense or a non-sense mutation in the NF2 gene. Using one-tailed Fisher's test (*p*-value < 0.05), statins and Imatinib analogues resulted the most enriched drug families with selective activity.



Supplementary Figure S2: Dasatinib and statin induce YAP/TAZ cytoplasmic retention. MDA-MB-231 cells treated with vehicle (-), statin 1  $\mu$ M (S) and Dasatinib 1  $\mu$ M (D) alone or in combination (SD) for 24 h. Representative images of immunofluorescence are shown.



**Supplementary Figure S3: Dasatinib and statin combination inhibits cell growth.** Cell growth of HT29 A. and PANC-1 B. cells treated with vehicle (–), statin 1  $\mu$ M (S) and Dasatinib 1  $\mu$ M (D) alone or in combination (SD) for three days. Error bars represent mean  $\pm$  s.d., from *n* = 3 biological replicates