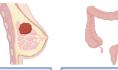# 5 Cancer Types

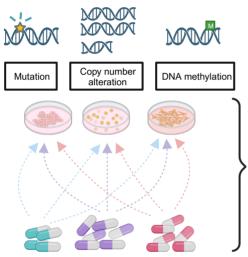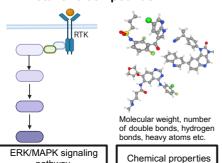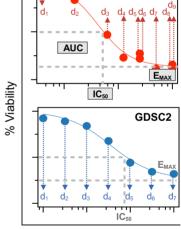| Breast invasive carcinoma (BRCA) N=52 | Colon adenocarcinoma (COAD) N=47 | Small cell lung cancer (SCLC) N=61 | Lung adenocarcinoma (LUAD) N=63 | Skin cutaneous melanoma (SKCM) N=54 |

Total of 277 human cancer cell lines

Mutation | Copy number alteration | DNA methylation

MOGP model

GDSC1

% Viability

AUC

IC$_{50}$

E$_{MAX}$

GDSC2

E$_{MAX}$

IC$_{50}$

Drug concentration

Total of 3 compounds

RTK

Molecular weight, number of double bonds, hydrogen bonds, heavy atoms etc.

ERK/MAPK signaling pathway | Chemical properties

Prediction of full dose-response curve

- enabling the extraction of various drug response metrics: area under the dose response curve (AUC), IC$_{50}$ and E$_{MAX}$.