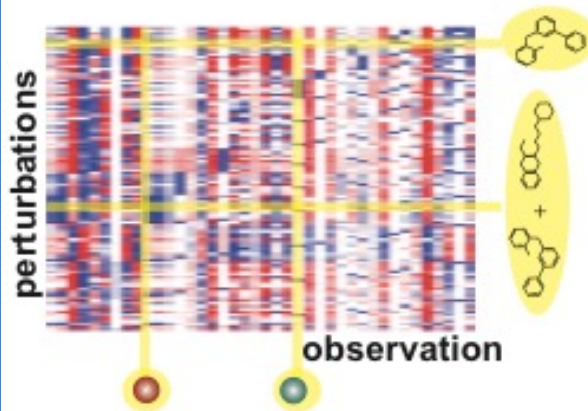


Predictive Biology • Information Biology

PERTURBATION BIOLOGY



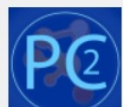
DYNAMIC MATHEMATICAL MODEL

$$\frac{dx_i^\mu(t)}{dt} = \phi \left(\sum_{j \neq i, k} w_{ij} x_j^\mu(t) + u_i^\mu \right) + x_i^\mu(t)$$

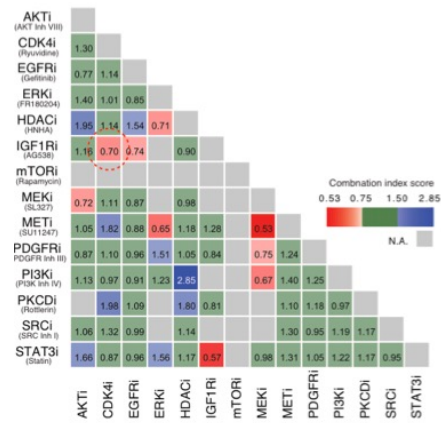
Network / Pathway



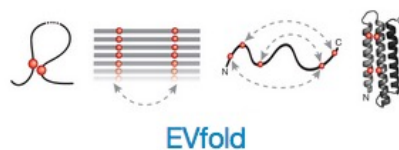
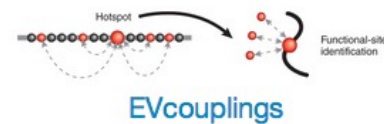
PATHWAYCOMMONS.ORG



COMBINATION THERAPY

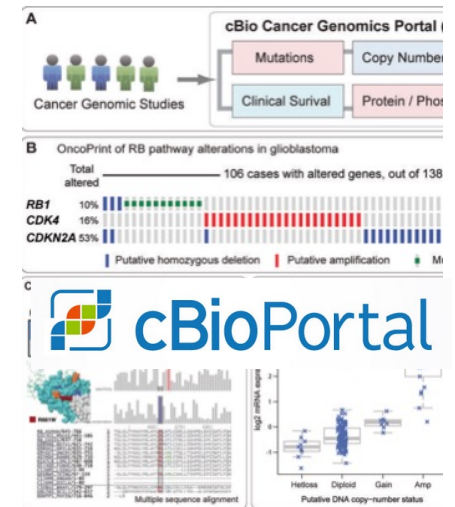


PROTEIN & RNA 3D STRUCS FROM SEQUENCES



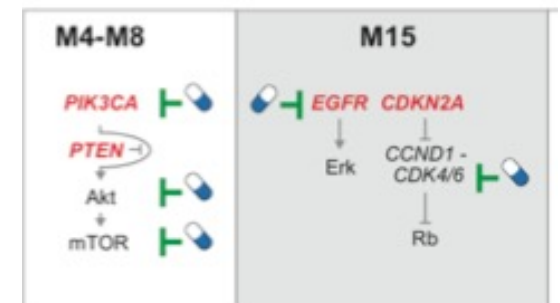
EVcouplings.org

CBIOPORTAL FOR CANCER GENOMICS



ACTIONABLE ONCOGENIC SIGNATURES

Oncogenic Signature Classes



* Indirectly targetable alterations with PARP-inhibitors

Drug