

TARGET PATHWAYS

24

SCREEN MEDIUMS

2

CANCER TYPES

3

TOTAL DRUGS

286

572

WELCOME TO ONCOMAP

This dashboard provides a comprehensive analysis of drug sensitivity and genomics in cancer. It offers insights into drug-tissue interactions, pathway impacts, and sensitivity patterns across cancer types, enabling data-driven decisions for precision medicine and therapeutic research.

INTRODUCTION

DRUG METRICS

CANCER EFFICACY

ONCOMAP

Linking Genes to Drug Efficacy

DRUG NAME

- 123138
- 123829
- 150412
- 50869
- 5-azacytidine
- 5-Fluorour...

Target Pathway

- ABL signaling
- Apoptosis r...
- Cell cycle
- Chromatin h...
- Chromatin h...
- Chromatin o...
- Cytoskeleton

CELL LINE

- A673
- ES5

CANCER TYPE

- LUAD
- MB
- OV

Top-Performing Drugs in Real-Time

GSK

DRUG METRICS

GSK2830371A
MOST EFFECTIVE DRUG

Zoledronate
MOST DIVERSE DRUG

3
UNIQUE TISSUES

Gene Expression vs. Drug Efficacy



Screen Medium Filtering

100%

R

241

D/F12

45

18.7%

LUAD
MOST SENSITIVE CANCER

286
UNIQUE DRUGS

ERK MAPK signaling
BEST PATHWAY

3

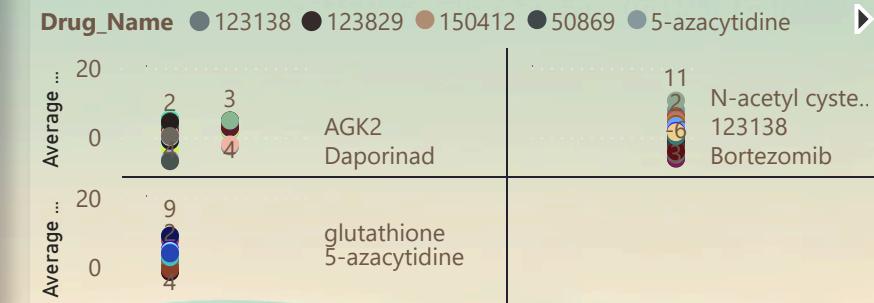
UNIQUE TISSUES

lung_NSCLC
LEAST SENSITIVE TISSUE

Alisertib
HIGHEST Z_SCORE

0.88
AVERAGE AUC

Drug Sensitivity by Cell Line



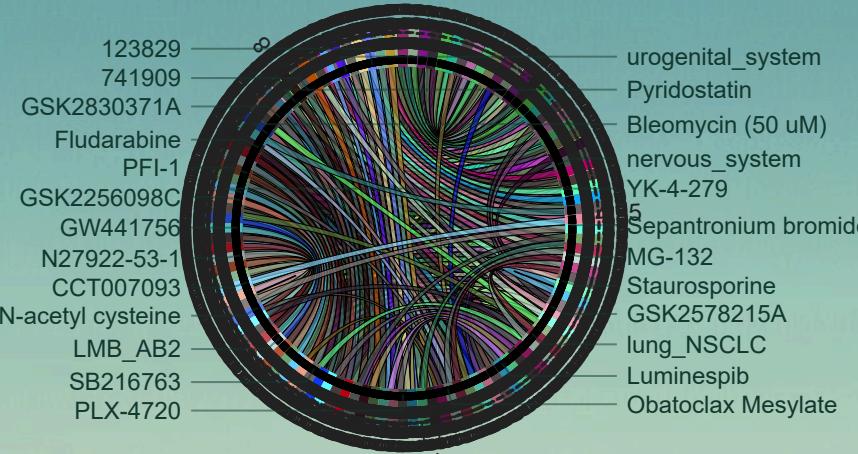
Cancer Type Prevalence



Cancer Type (matc...
● MB
● LUAD
● OV



Drug-Tissue Interaction Network



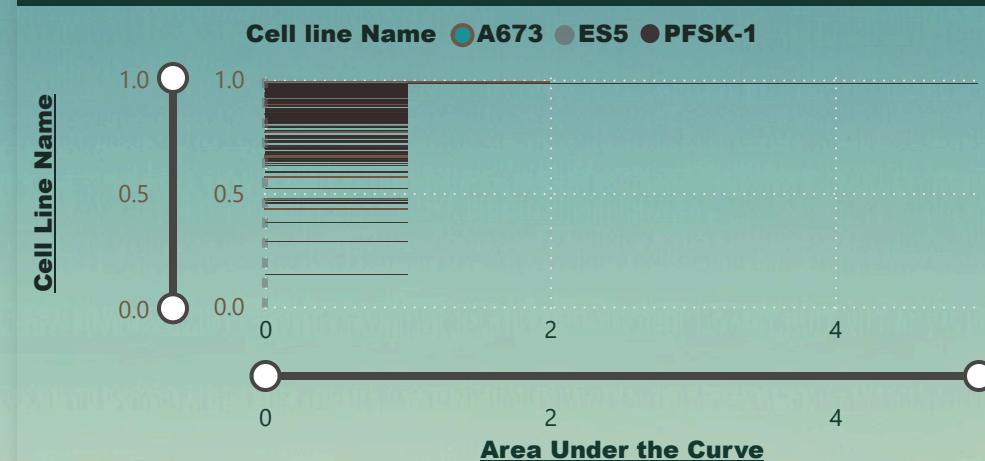
CANCER TYPE

- LUAD
- MB
- OV

TARGET PATHWAY

- ABL signaling
- Apoptosis regulation
- Cell cycle

Drug Efficacy Comparison



Drug Response Table

Cell line Name	Sum of LN_IC50	Cancer Type (matching TCGA label)	Sum of Area Under the Curve	Drug_Name
A673	2.17	OV	0.81	5-azacytidine
A673	3.85	OV	0.96	A-366
A673	2.24	LUAD	0.93	AGK2
A673	7.79	OV	0.90	ascorbate (vitamin C)
A673	4.37	LUAD	0.97	Avagacestat
Total	700.82		252.92	

286

Total Drugs

2.86

Median Sensitivity

Trend of Drug Effectiveness Over Drugs

● Average AUC ● Average of Z_Score



DRUG NAME

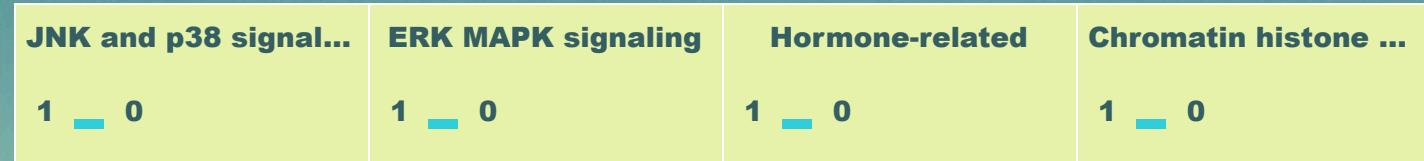
- 123138
- 123829
- 150412
- 50869
- 5-azacytidine
- 5-Fluorouracil

CELL LINE NA...

- A673
- ES5
- PFSK-1

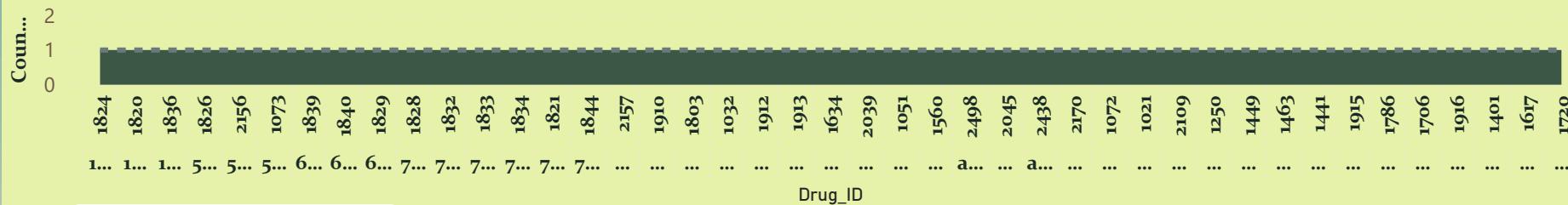
CANCER EFFICACY

Target Pathway Performance Analysis



Gene Expression Count

Growth Properties - - - Adherent



Tissue Type



Z_Score

-2.62	1.27
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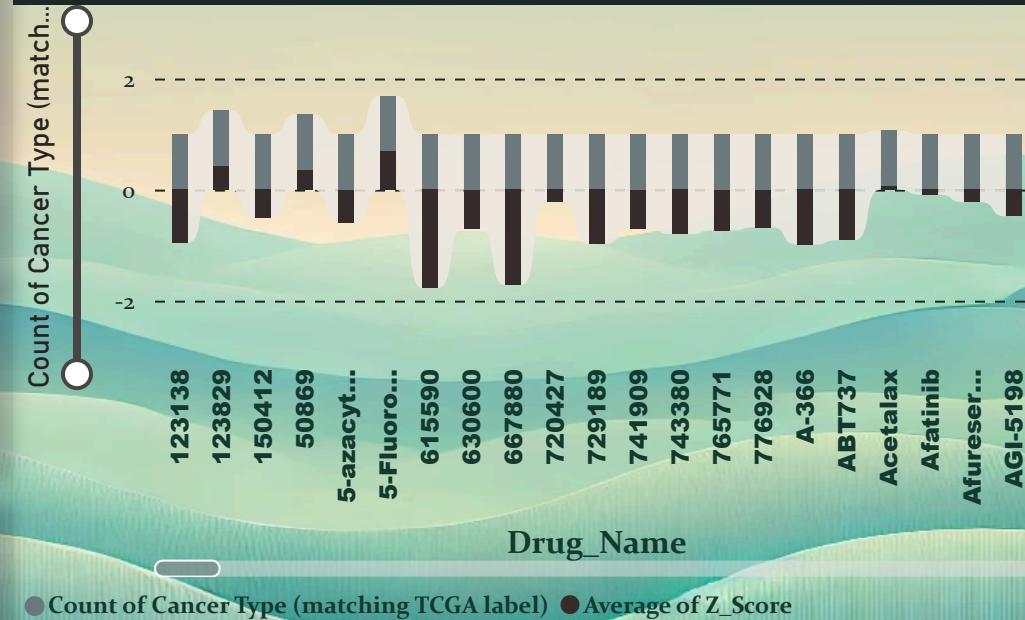
TISSUE

All

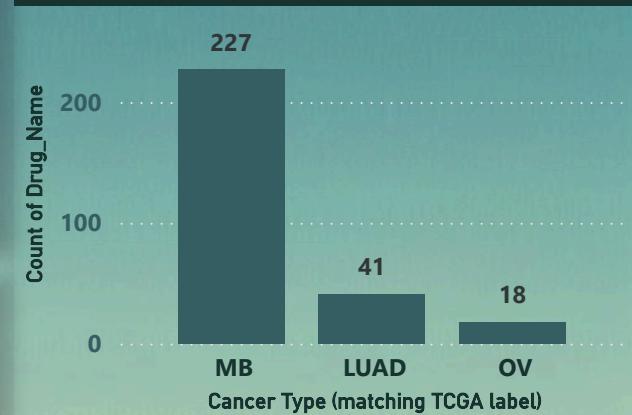
CANCER TYPE

All

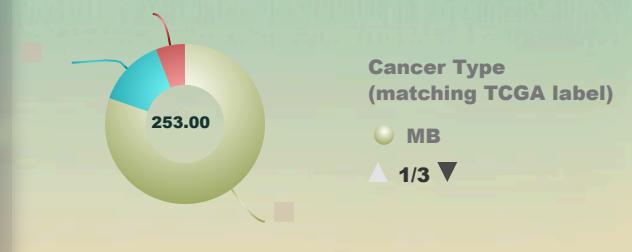
Drug Rankings by cancer coverage and Response Strength



Top Cancer Types by drug coverage



Effective Drugs by Cancer Type



DRUG NAME

DRUG NAME	CANCER TYPE
123138	LUAD
123829	MB
150412	OV
50869	OV
5-azacytidine	MB

HOME

