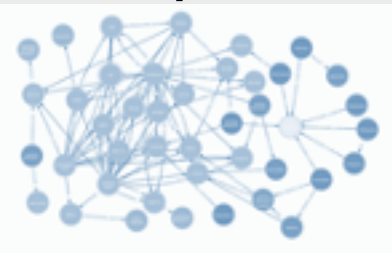




A schema of a KG

+



A knowledge graph

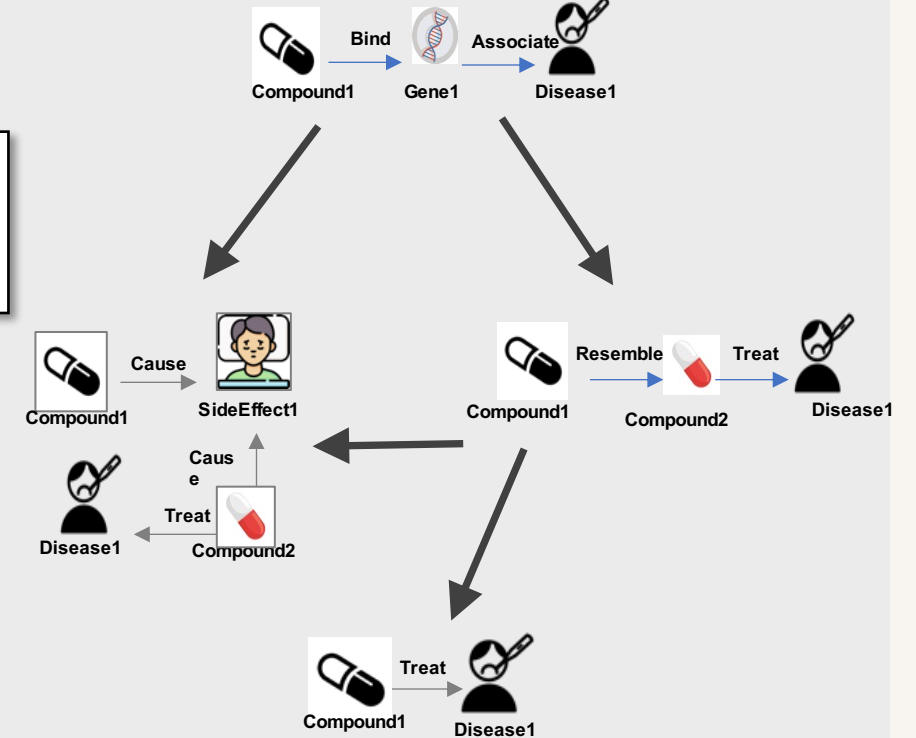
Knowledge graph
Tabularnizar

Sample Set

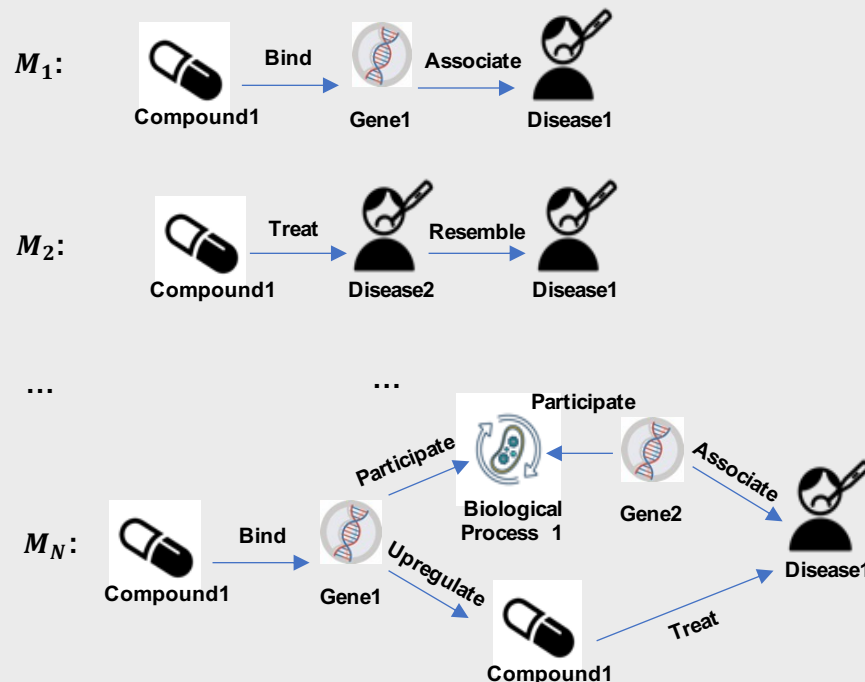
Data object	X_0	X_1	...	X_N
(e_1^h, e_1^t)	1	1	...	1
(e_2^h, e_2^t)	0	0	...	1
...
(e_M^h, e_M^t)	0	1	...	1

Causal
Knowledge
Discovery

Concept-level causal dependency graph



Meta structure



Mapping
meta
structure to
variable

Meta structural-based variable

$$X_1 = f_{(compound1, disease1).M_1}$$

$$X_2 = f_{(compound1, disease1).M_2}$$

...

$$X_N = f_{(compound1, disease1).M_N}$$

Generating
samples

Tabular
sample set

Searching
Meta
structure

(Compound ,Disease)