a. Clinical Text Biomarker Mining

Name: John Doe
DOB: 6/15/1952
History of Present Illness:
65 year old male w h/o
Stage 4 lung adeno ca
(EGFR neg, ALK neg, ROS1
neg, BRAF neg, PDL1 high
expression (60%) >
cisplatin/alimta/pembro >
05/22/2017

Clinical Notes

Model

Biomaker Status

0	EGFR
0	ALK
0	ROS1
0	BRAF
1	PDL1
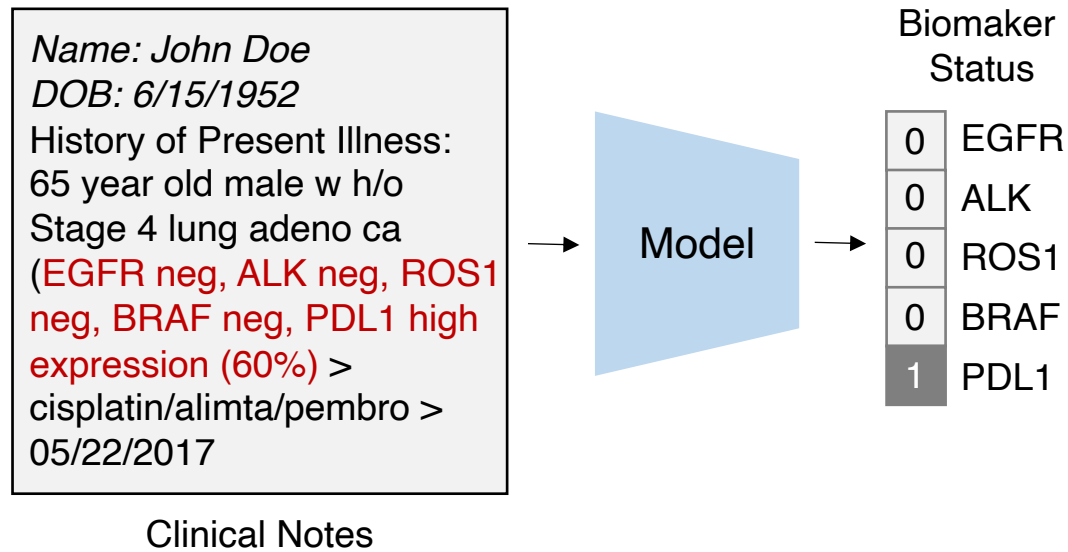
b. Biomedical Literature Gene Knowledge Mining

Gene Protein Cell Line

Analysis of the region 3' to
the CD4þ T-cell gene Rpt1
(encoding regulatory
protein Tlymphocyte 1) led
to the definition of a
silencer element that
inhibits heterologous gene
expression in certain CD4þ
T-cell lines but not in B-cell
or nonlymphoid cell lines.

Entity Recognition Model

Rpt1
Tlymphocyte 1
CD4þ T-cell
B-cell
nonlymphoid

Relation Extraction Model

Rpt1
Encode
Tlymphocyte 1