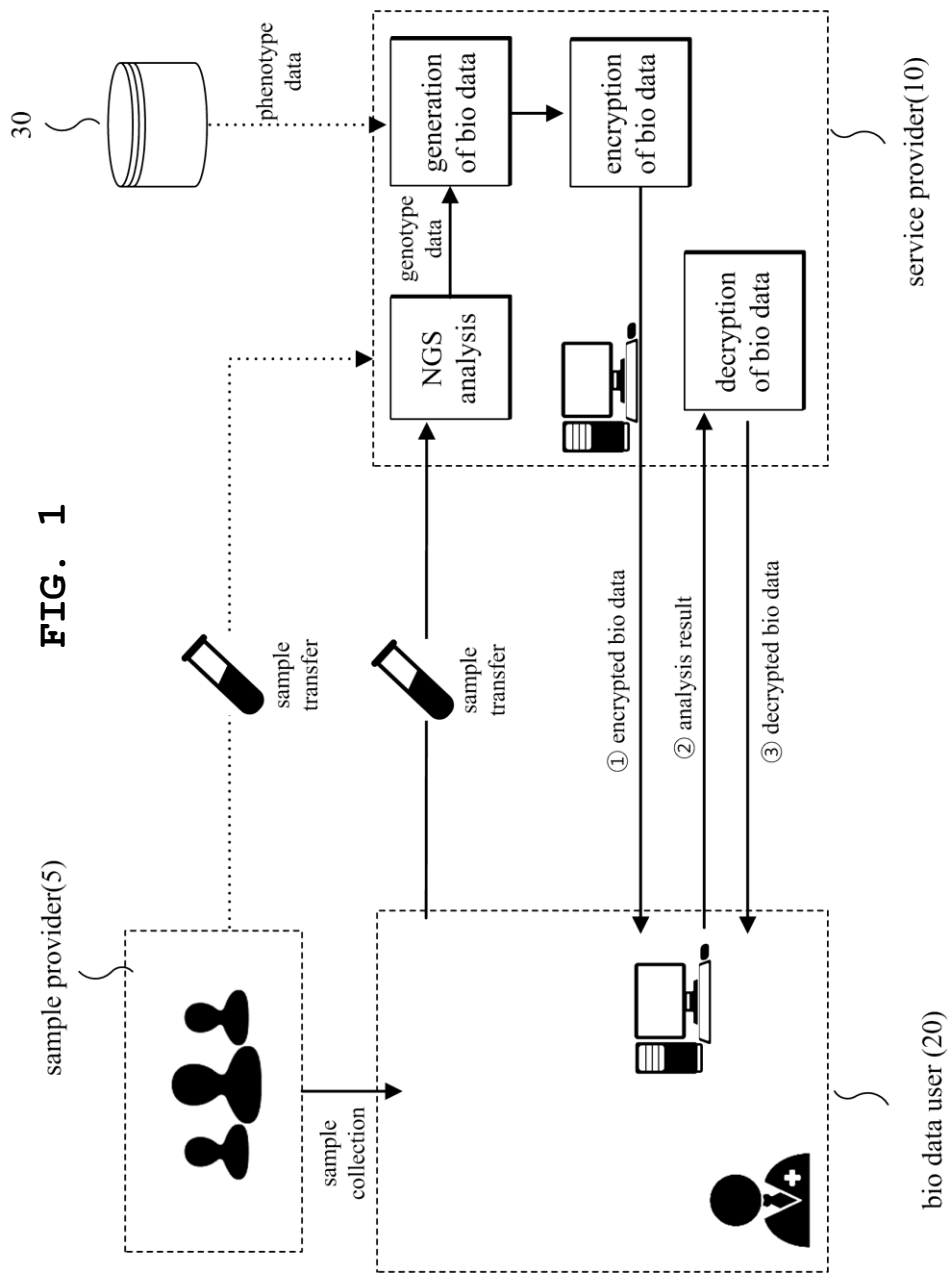
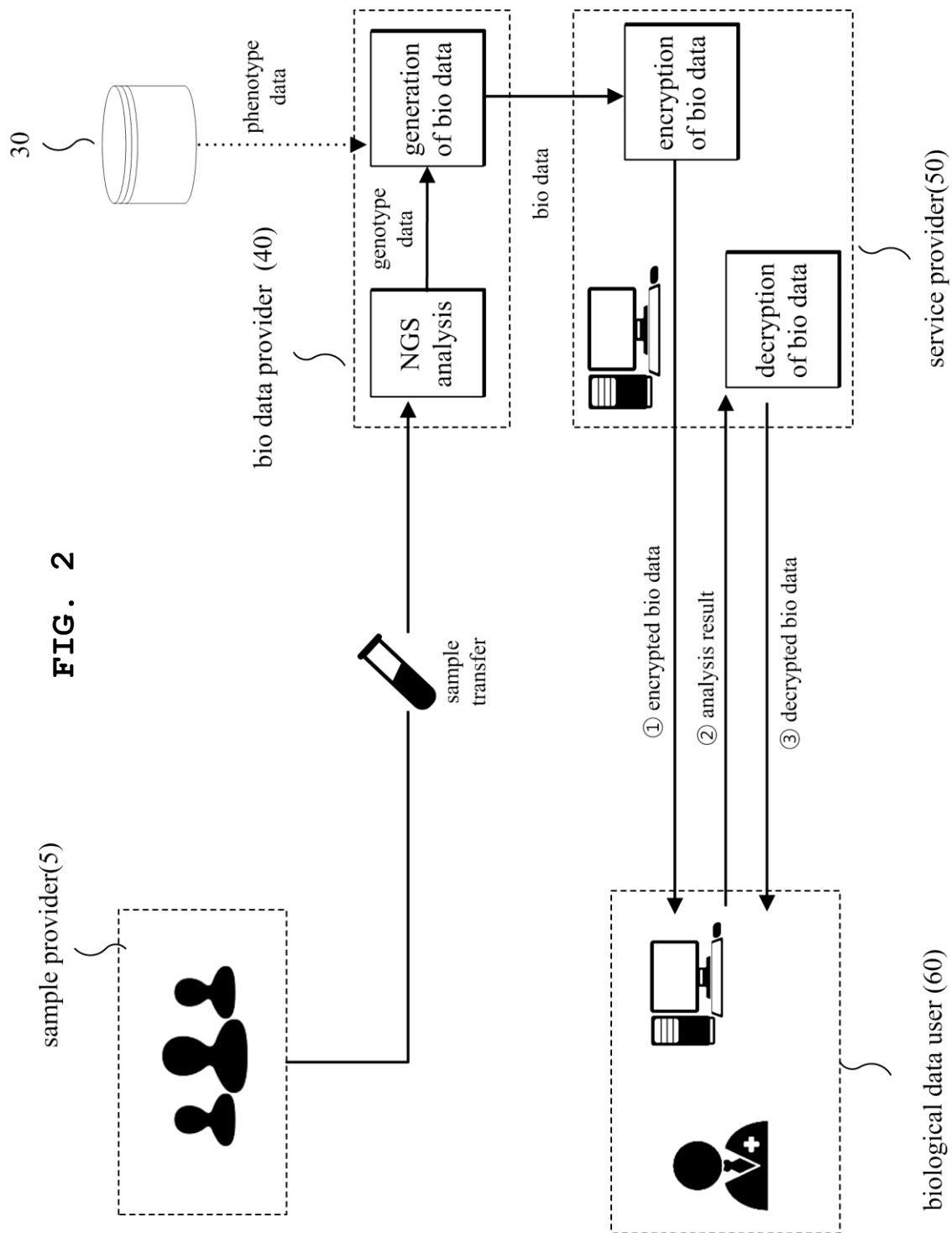
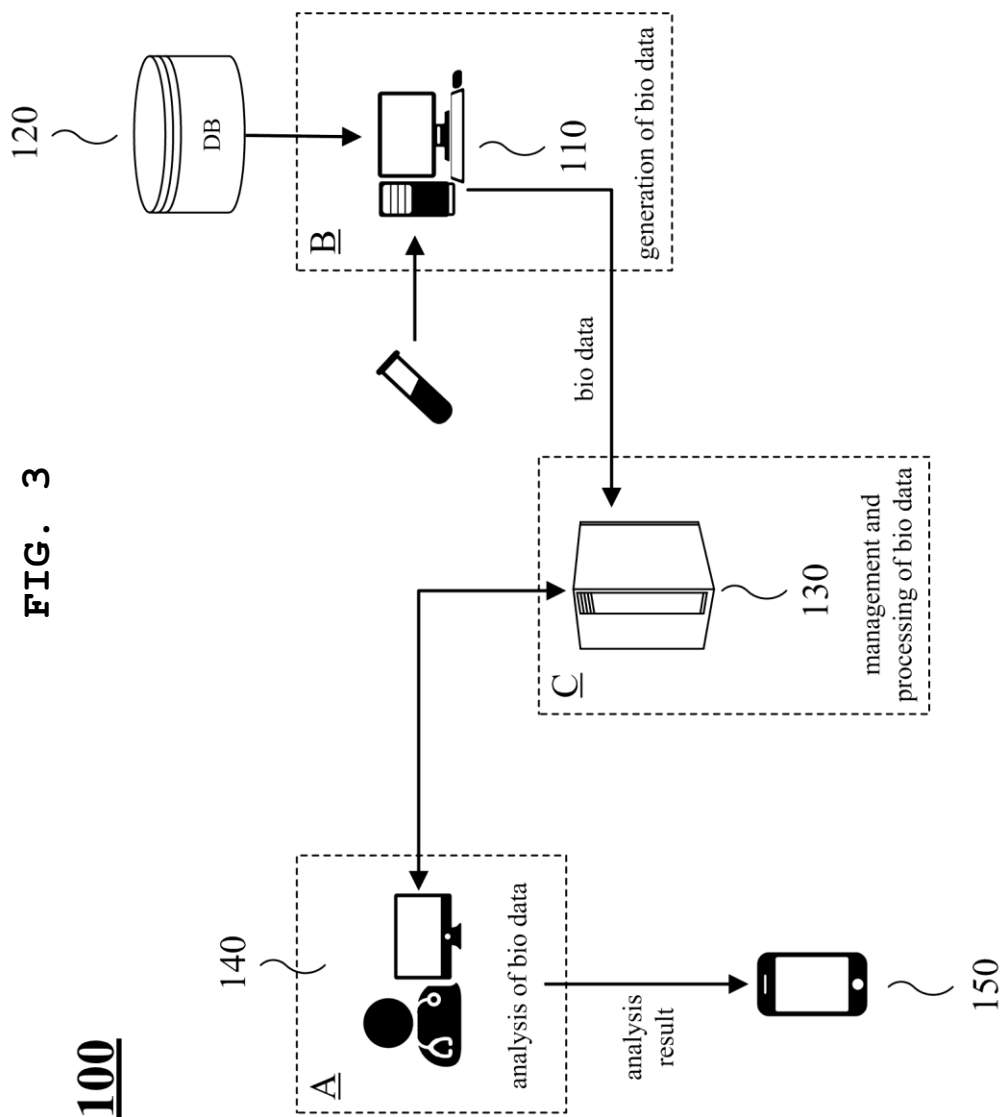
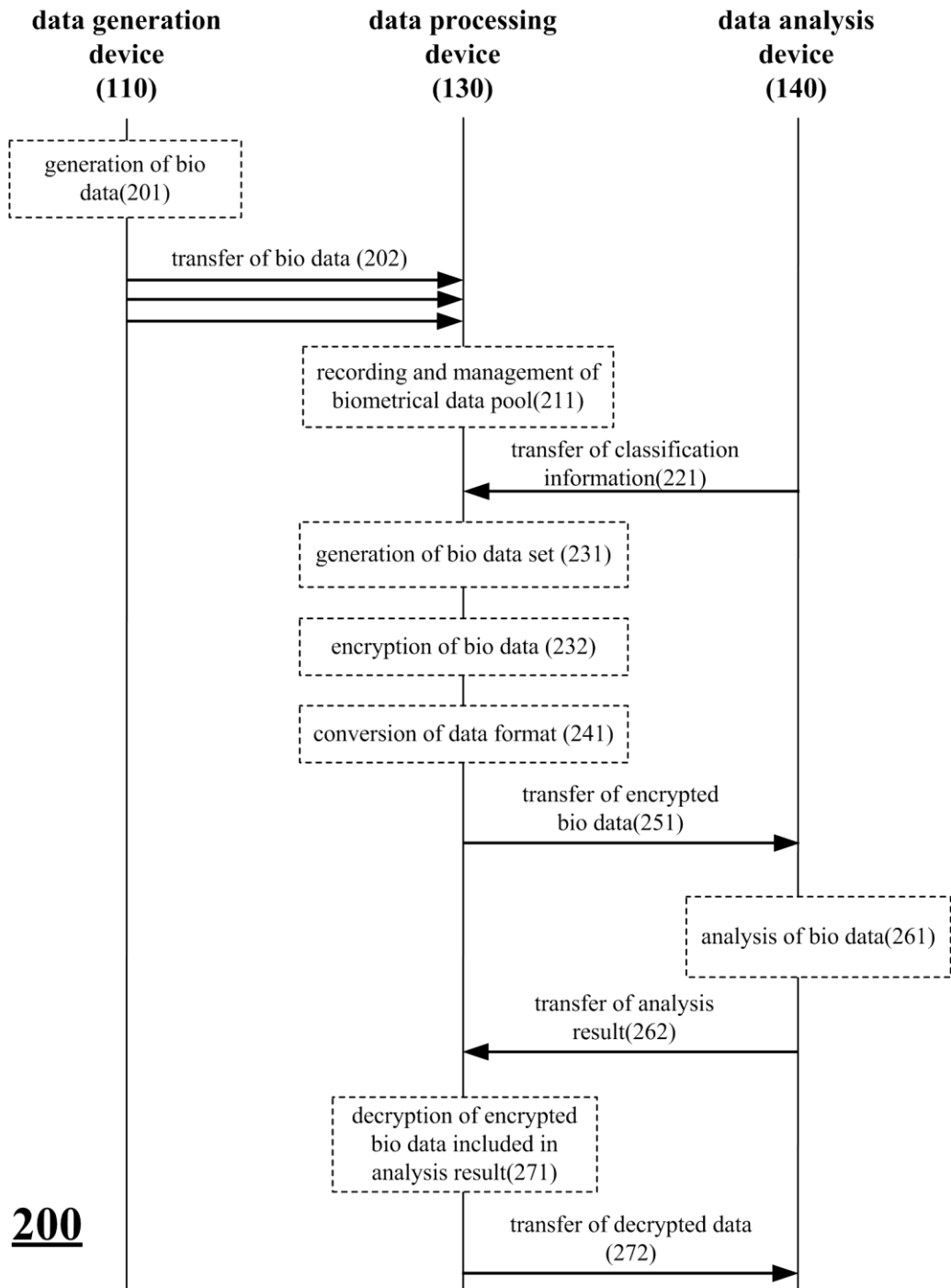








[FIG. 4]



200

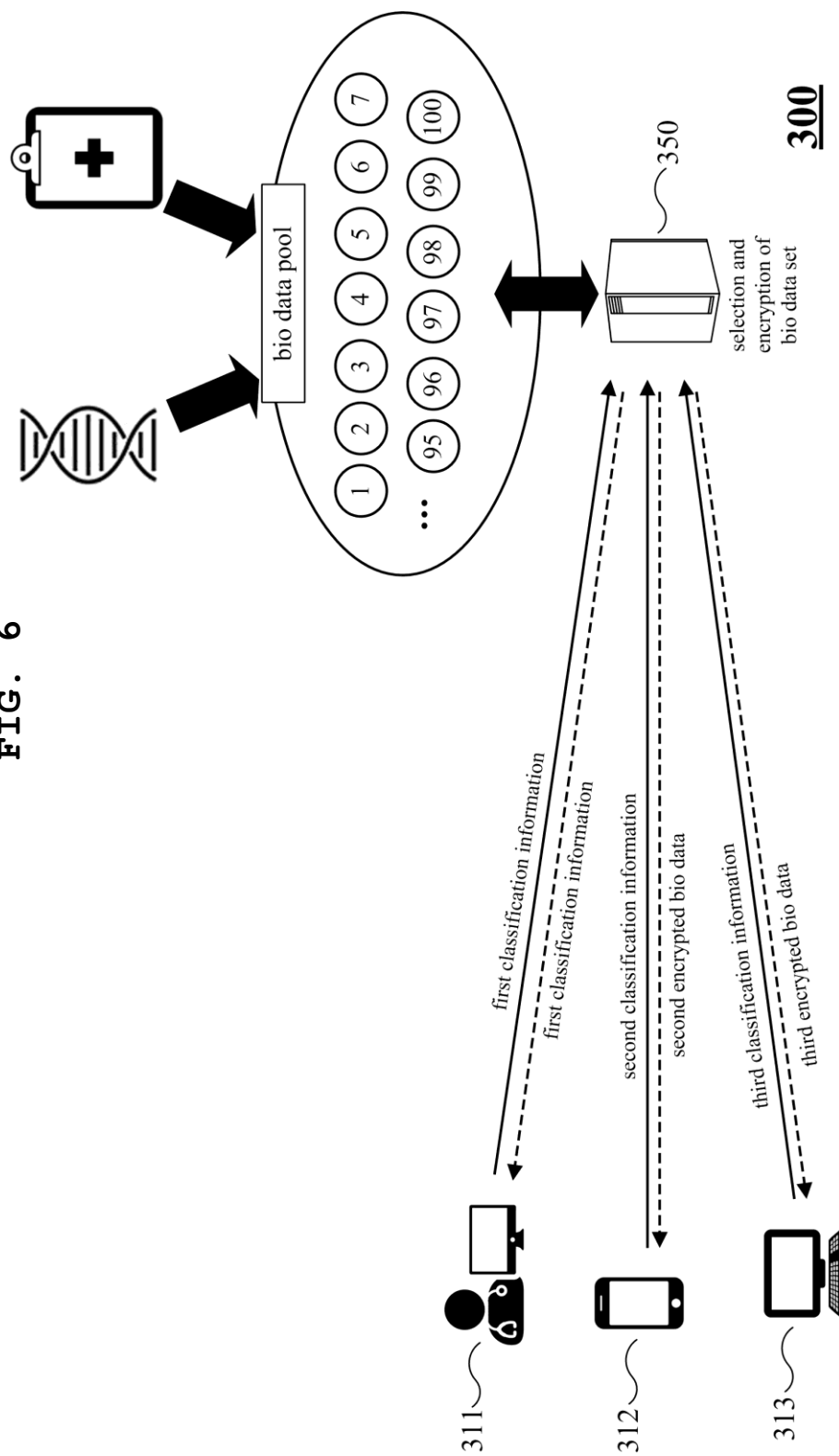
original genotype data			encrypted genotype data	
genetic identifier	genetic location information	variant information	genetic identifier and genetic location	variant information
1	323342	AA	111010101011101	11
2	1234513	AT	101110100011111	01
X	23534	GC	010010101010100	10
MT	12030	CC	111011101001100	00

FIG. 5A

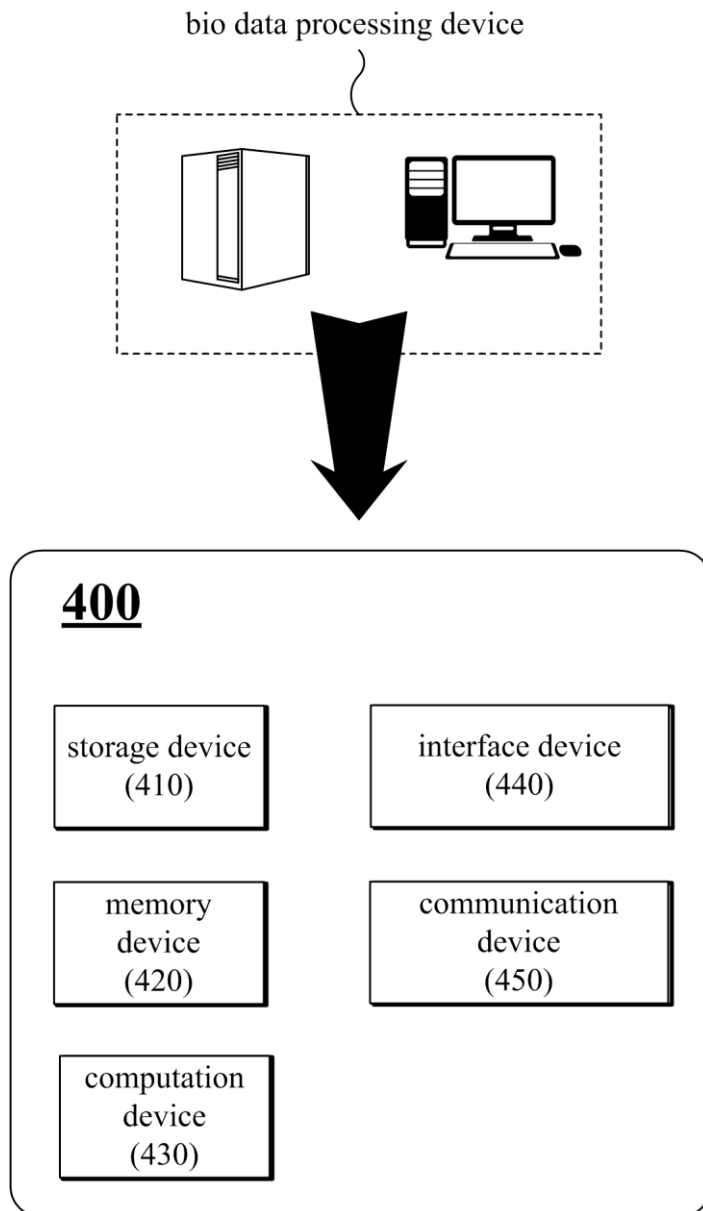
original phenotype data		encrypted phenotype data
item	information	
sex	male, female	0,1
race	Asian, Korean, ...	001,011,000
height	183, 160,..	101001, 100110,..
medication	antibiotics and Aspirin,...	1000110, 1110110, ..

FIG. 5B

FIG. 6



[FIG. 7]



[FIG. 8]

500

