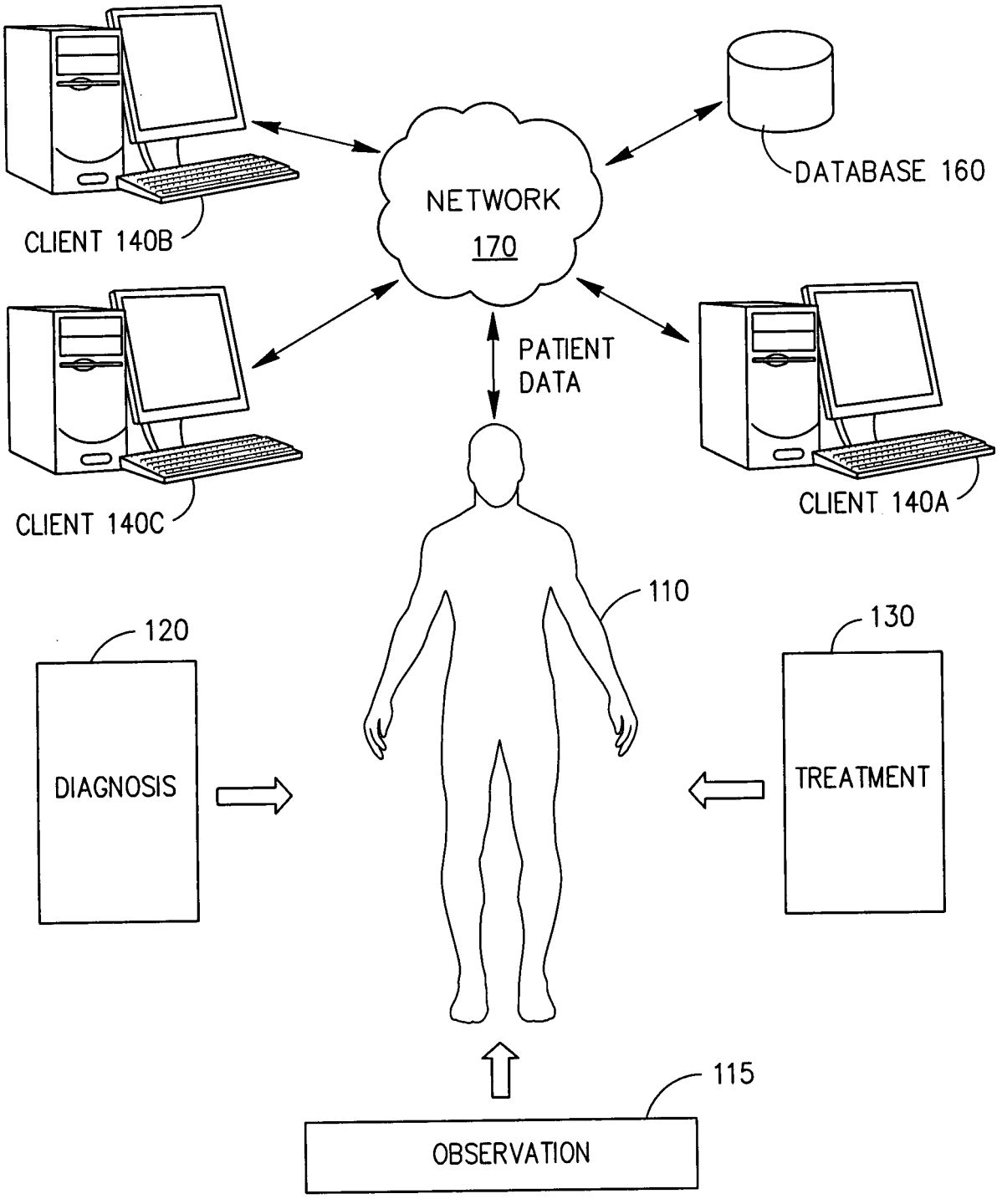
NETWORK
170
DATABASE 160
CLIENT 140B
CLIENT 140C
CLIENT 140A
PATIENT
DATA
110
120
DIAGNOSIS
130
TREATMENT
115
OBSERVATION
METHOD AND TREATMENT
USING GENE EXPRESSION
PORTFOLIO 100

Figure 1

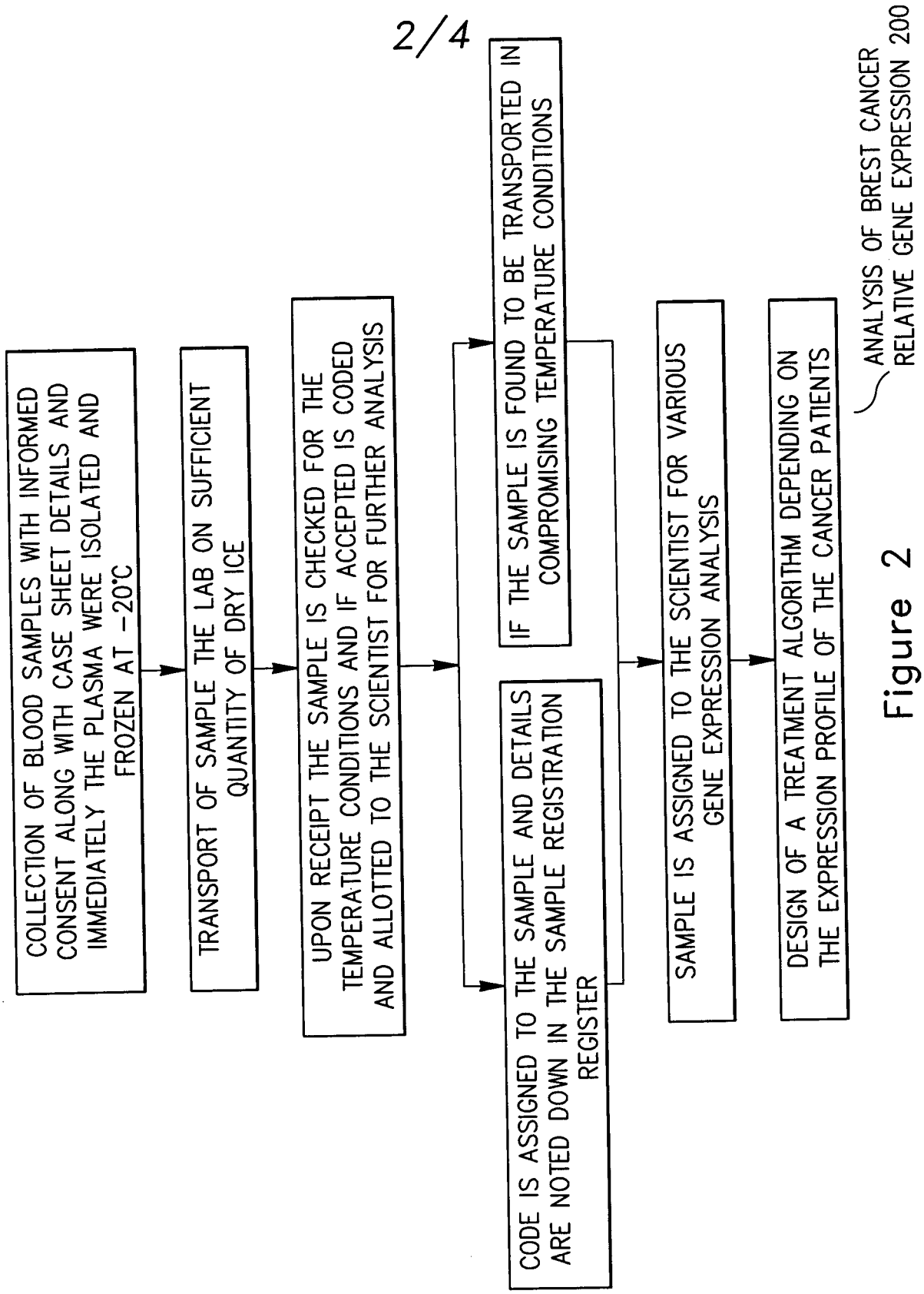
COLLECTION OF BLOOD SAMPLES WITH INFORMED CONSENT ALONG WITH CASE SHEET DETAILS AND IMMEDIATELY THE PLASMA WERE ISOLATED AND FROZEN AT −20°C
TRANSPORT OF SAMPLE THE LAB ON SUFFICIENT QUANTITY OF DRY ICE
UPON RECEIPT THE SAMPLE IS CHECKED FOR THE TEMPERATURE CONDITIONS AND IF ACCEPTED IS CODED AND ALLOTTED TO THE SCIENTIST FOR FURTHER ANALYSIS
IF THE SAMPLE IS FOUND TO BE TRANSPORTED IN COMPROMISING TEMPERATURE CONDITIONS
CODE IS ASSIGNED TO THE SAMPLE AND DETAILS ARE NOTED DOWN IN THE SAMPLE REGISTRATION REGISTER
SAMPLE IS ASSIGNED TO THE SCIENTIST FOR VARIOUS GENE EXPRESSION ANALYSIS
DESIGN OF A TREATMENT ALGORITHM DEPENDING ON THE EXPRESSION PROFILE OF THE CANCER PATIENTS
ANALYSIS OF BREST CANCER RELATIVE GENE EXPRESSION 200

Figure 2

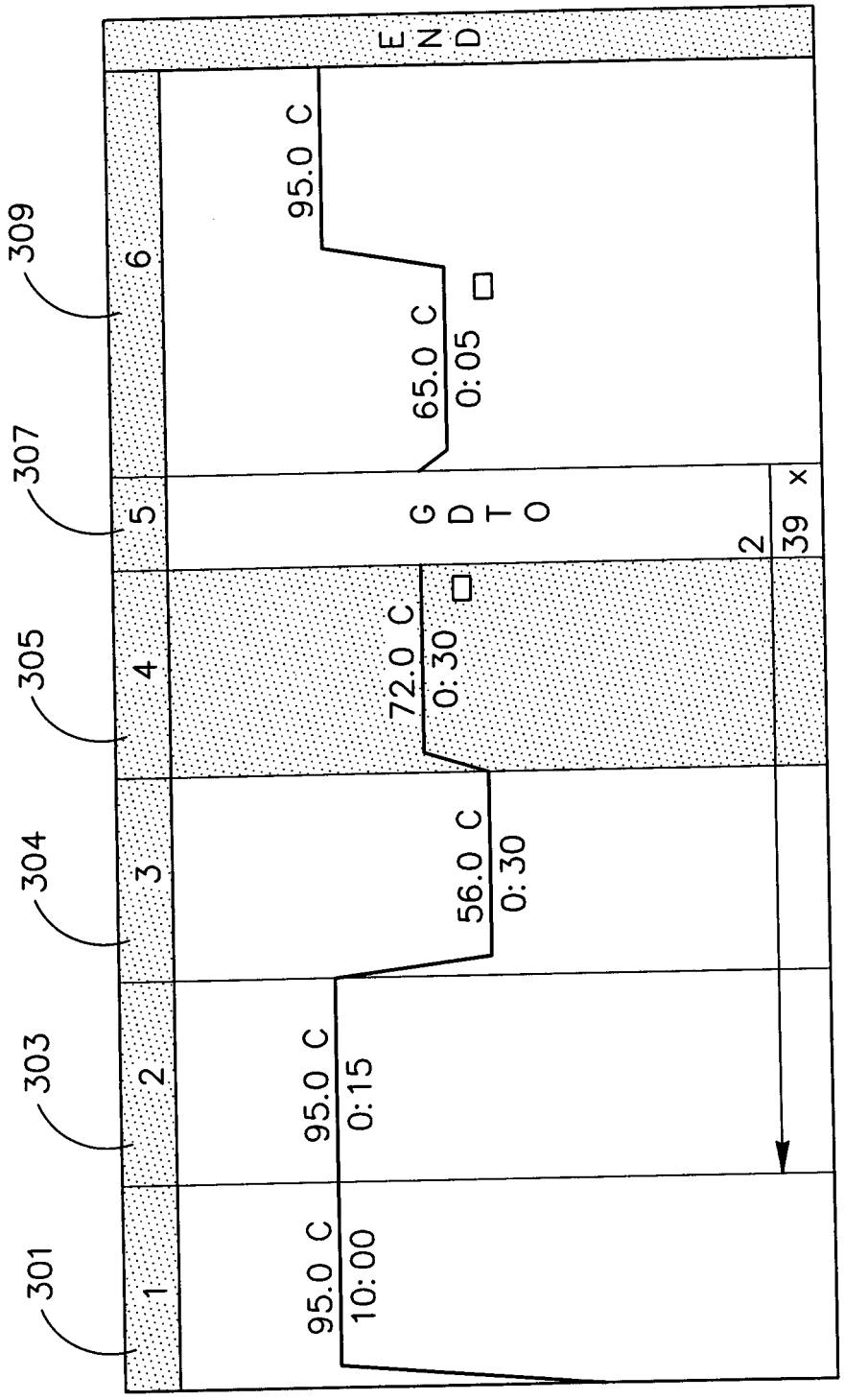
REAL TIME PCR
PROGRAM OVERVIEW 300
301
303
304
305
307
309
1
2
3
4
5
6
95.0 C
10:00
95.0 C
0:15
56.0 C
0:30
72.0 C
0:30
GOTO 2
39 x
65.0 C
0:05
95.0 C
END

Figure 3

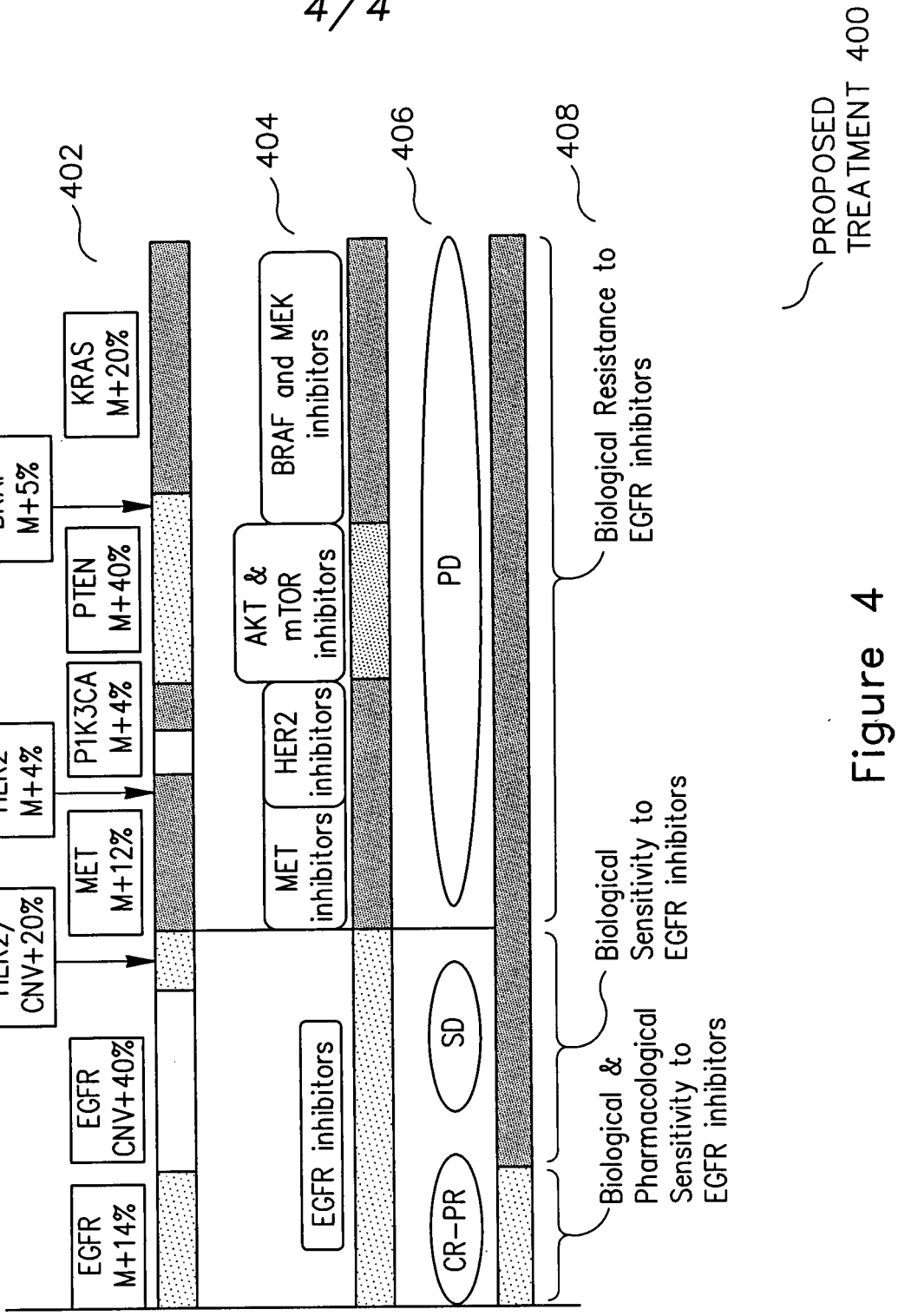
PROPOSED TREATMENT 400
402
404
406
408
EGFR M+14%
EGFR CNV+40%
HER2/ CNV+20%
MET M+12%
HER2 M+4%
P1K3CA M+4%
PTEN M+40%
BRAF M+5%
KRAS M+20%
EGFR inhibitors
MET inhibitors
HER2 inhibitors
AKT & mTOR inhibitors
BRAF and MEK inhibitors
CR-PR
SD
PD
Biological & Pharmacological Sensitivity to EGFR inhibitors
Biological Sensitivity to EGFR inhibitors
Biological Resistance to EGFR inhibitors

Figure 4