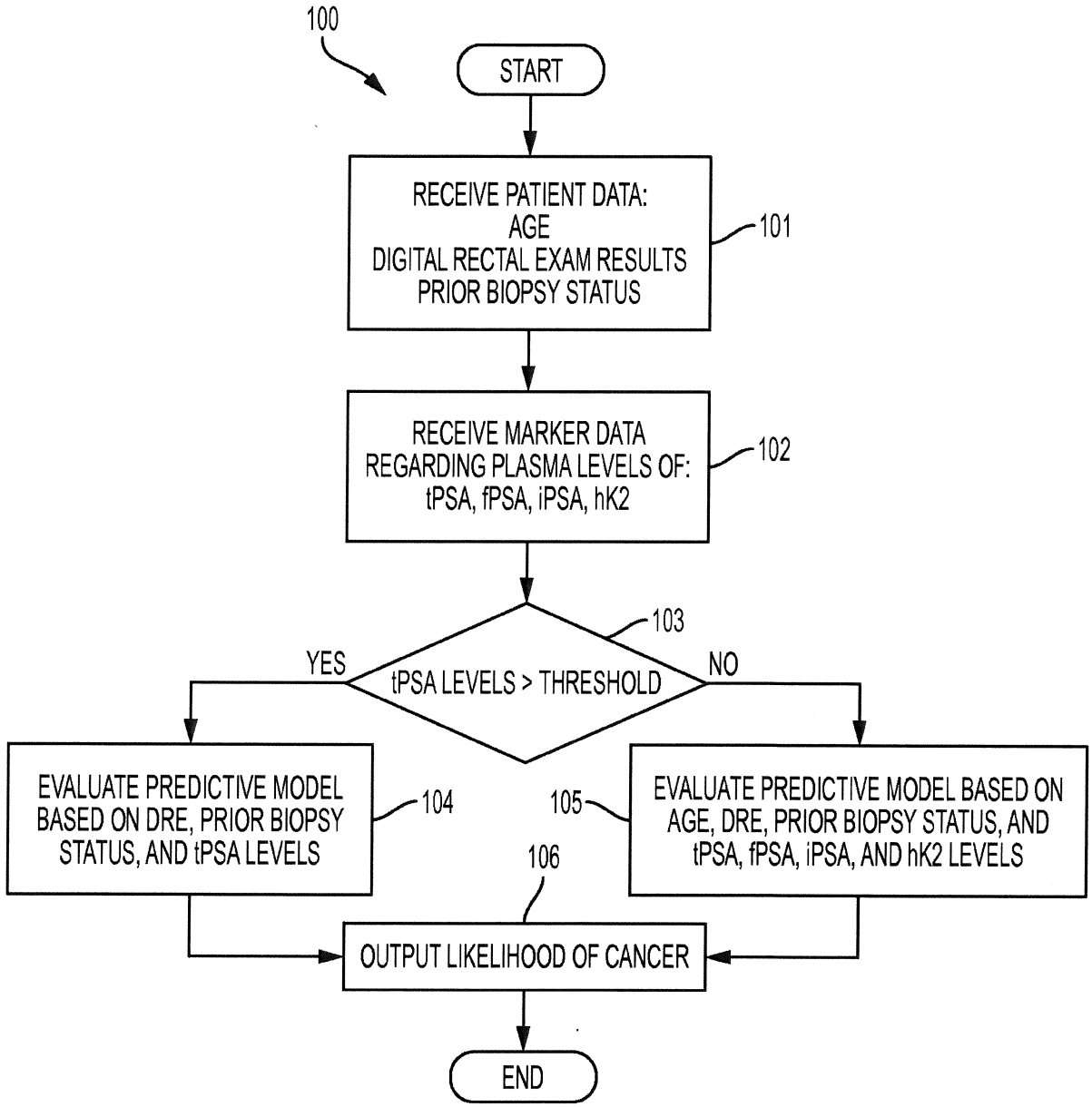

100
START
RECEIVE PATIENT DATA:
AGE
DIGITAL RECTAL EXAM RESULTS
PRIOR BIOPSY STATUS
101
RECEIVE MARKER DATA
REGARDING PLASMA LEVELS OF:
tPSA, fPSA, iPSA, hK2
102
103
YES
tPSA LEVELS > THRESHOLD
NO
EVALUATE PREDICTIVE MODEL
BASED ON DRE, PRIOR BIOPSY
STATUS, AND tPSA LEVELS
104
105
EVALUATE PREDICTIVE MODEL BASED ON
AGE, DRE, PRIOR BIOPSY STATUS, AND
tPSA, fPSA, iPSA, AND hK2 LEVELS
106
OUTPUT LIKELIHOOD OF CANCER
END

FIG. 1A

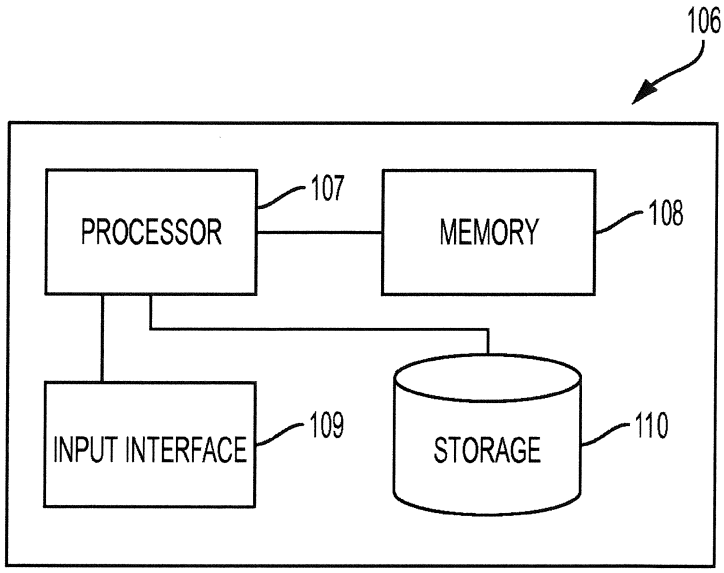

106
PROCESSOR
107
MEMORY
108
INPUT INTERFACE
109
STORAGE
110

FIG. 1B

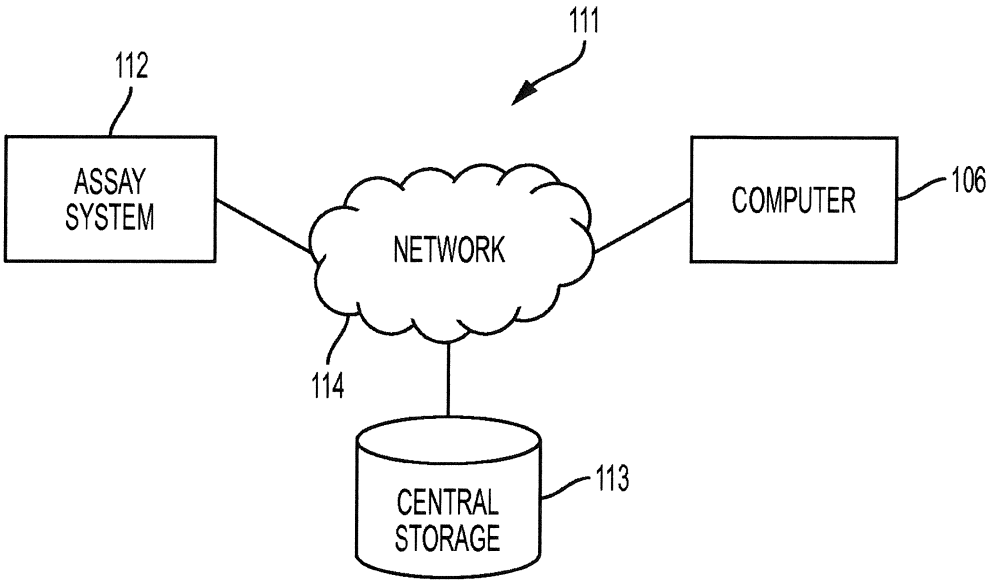

111
112
ASSAY SYSTEM
NETWORK
COMPUTER
106
114
CENTRAL STORAGE
113

FIG. 1C

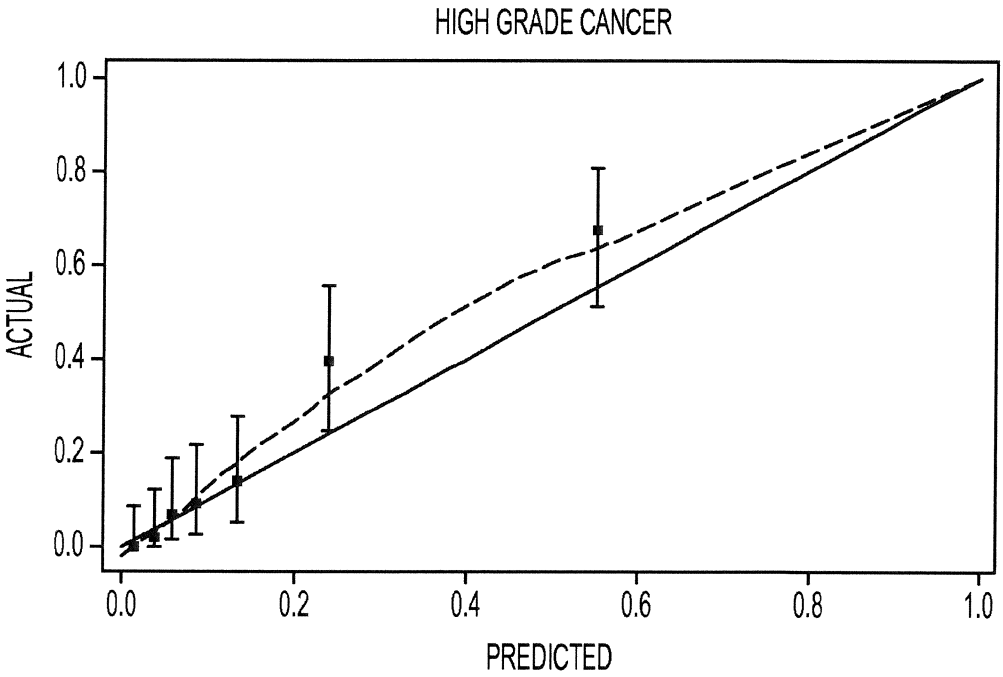


FIG. 2

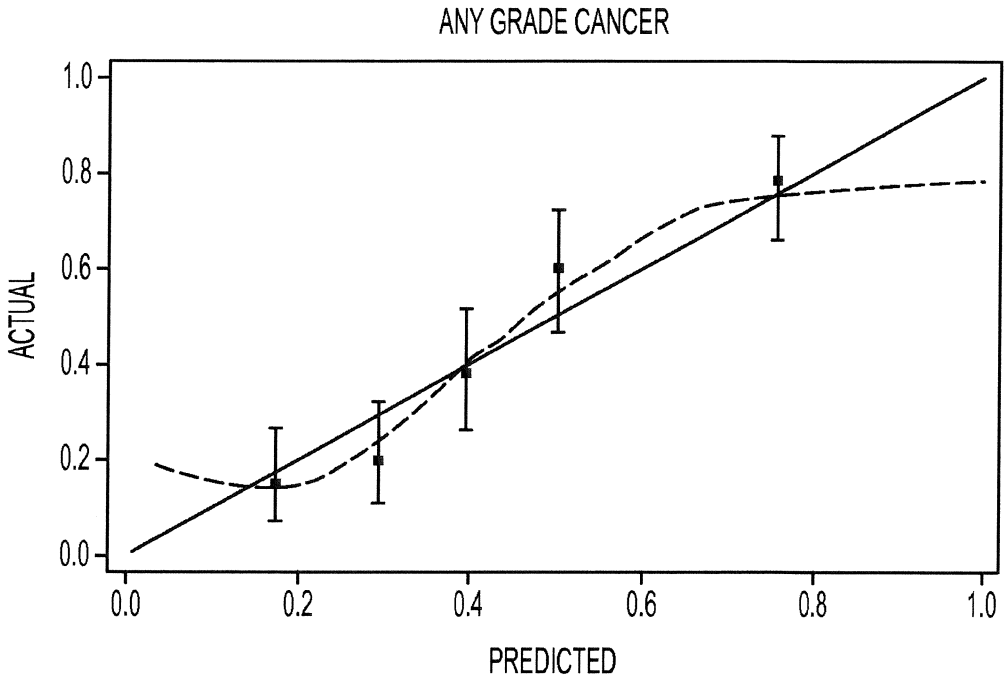


FIG. 3

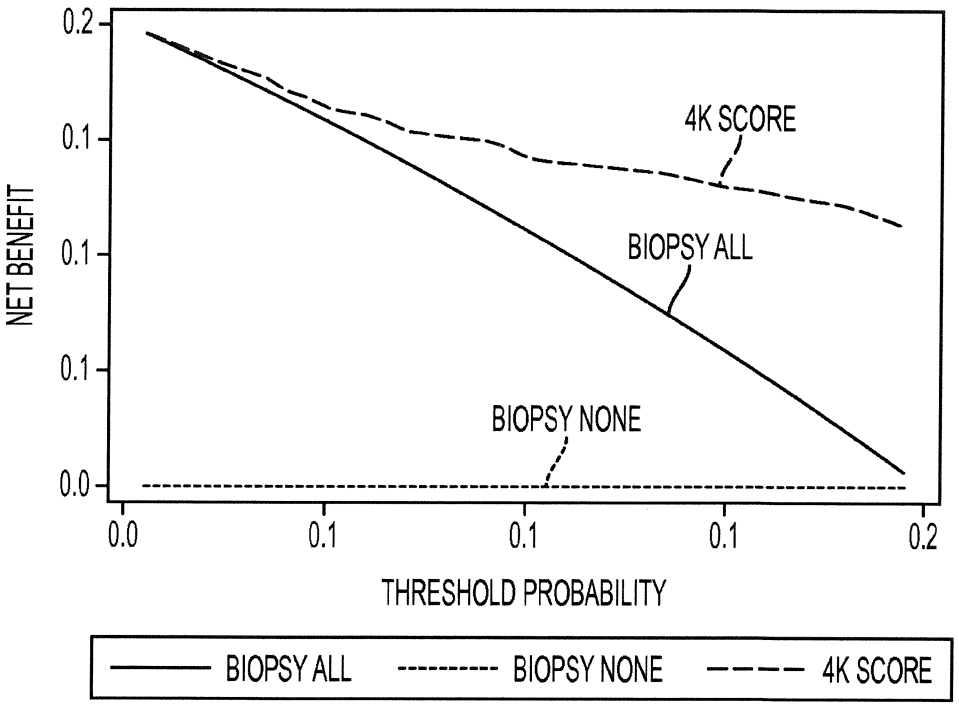

0.2
0.1
0.1
0.1
0.0
NET BENEFIT
4K SCORE
BIOPSY ALL
BIOPSY NONE
0.0
0.1
0.1
0.1
0.2
THRESHOLD PROBABILITY
BIOPSY ALL
BIOPSY NONE
4K SCORE

FIG. 4

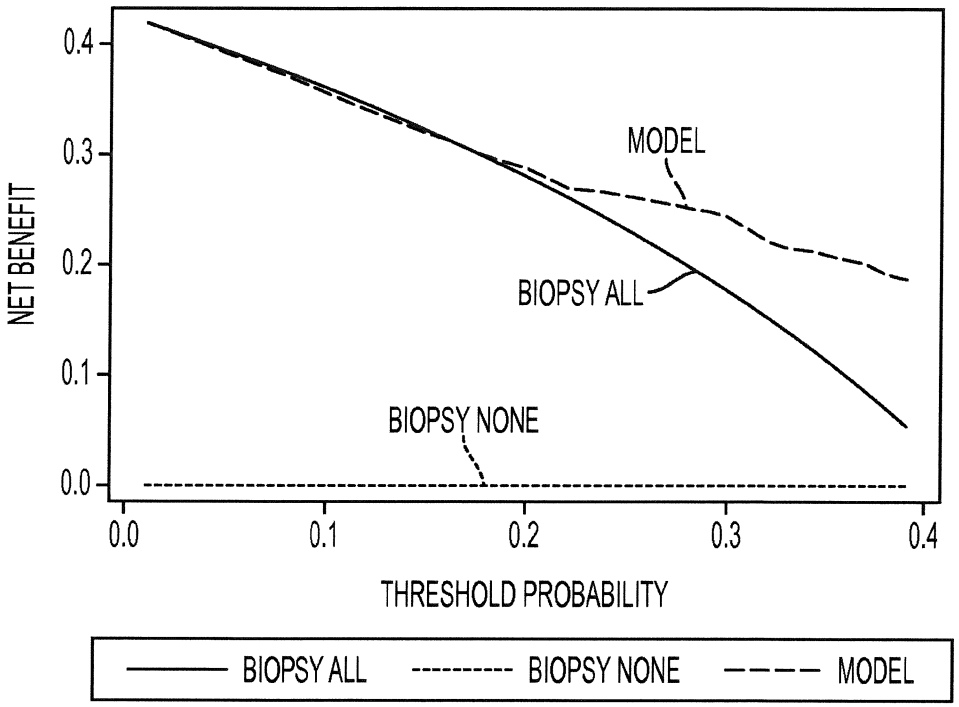

0.4
0.3
0.2
0.1
0.0
NET BENEFIT
MODEL
BIOPSY ALL
BIOPSY NONE
0.0
0.1
0.2
0.3
0.4
THRESHOLD PROBABILITY
BIOPSY ALL
BIOPSY NONE
MODEL

FIG. 5

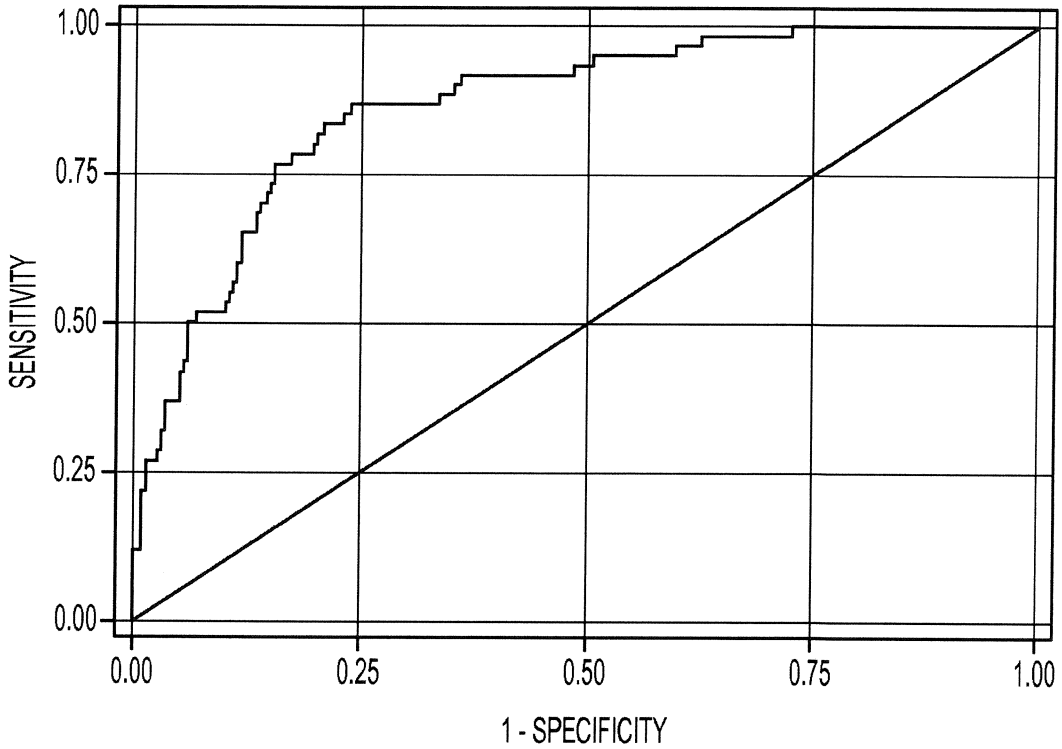

1.00
0.75
0.50
0.25
0.00
SENSITIVITY
0.00
0.25
0.50
0.75
1.00
1 - SPECIFICITY

FIG. 6

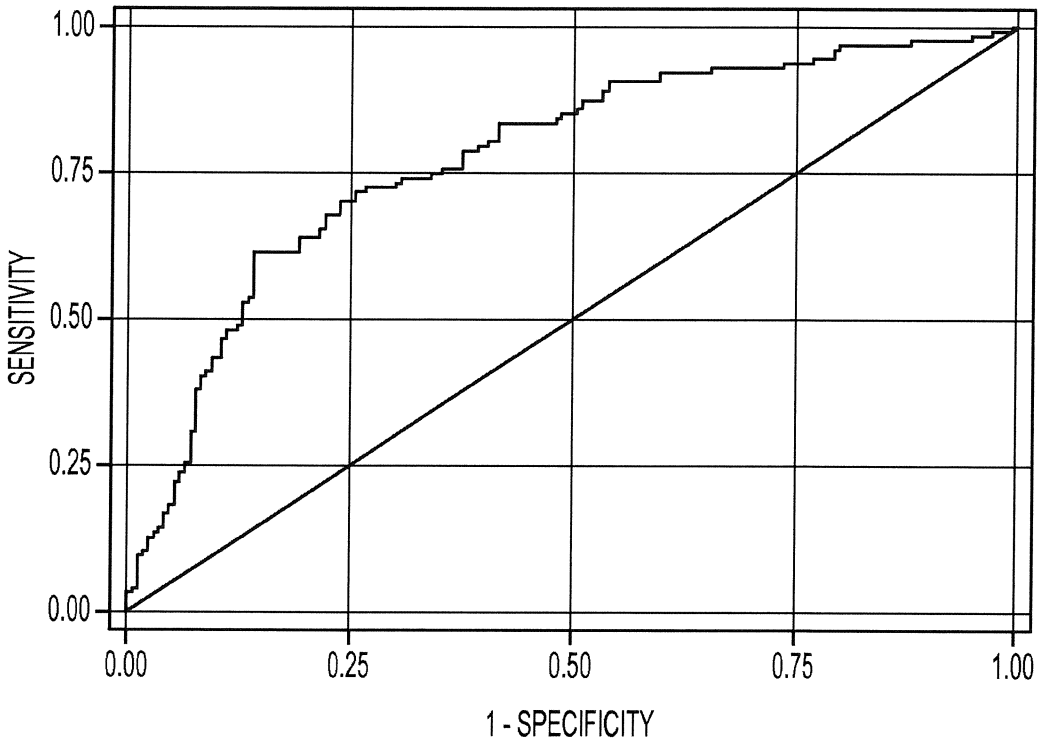

1.00
0.75
0.50
0.25
0.00
SENSITIVITY
0.00
0.25
0.50
0.75
1.00
1 - SPECIFICITY

FIG. 7

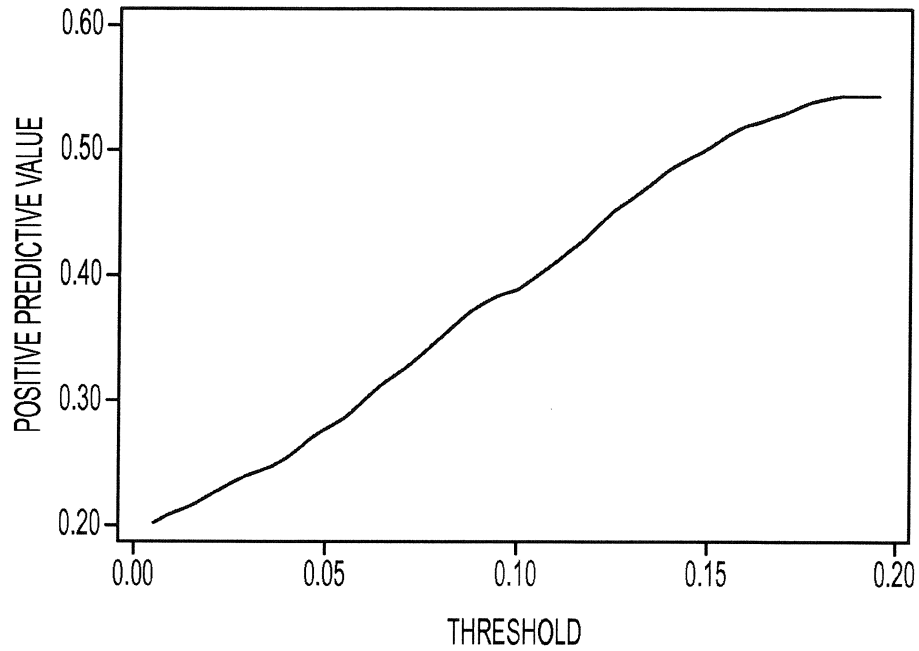

POSITIVE PREDICTIVE VALUE
0.60
0.50
0.40
0.30
0.20
0.00
0.05
0.10
0.15
0.20
THRESHOLD

FIG. 8A

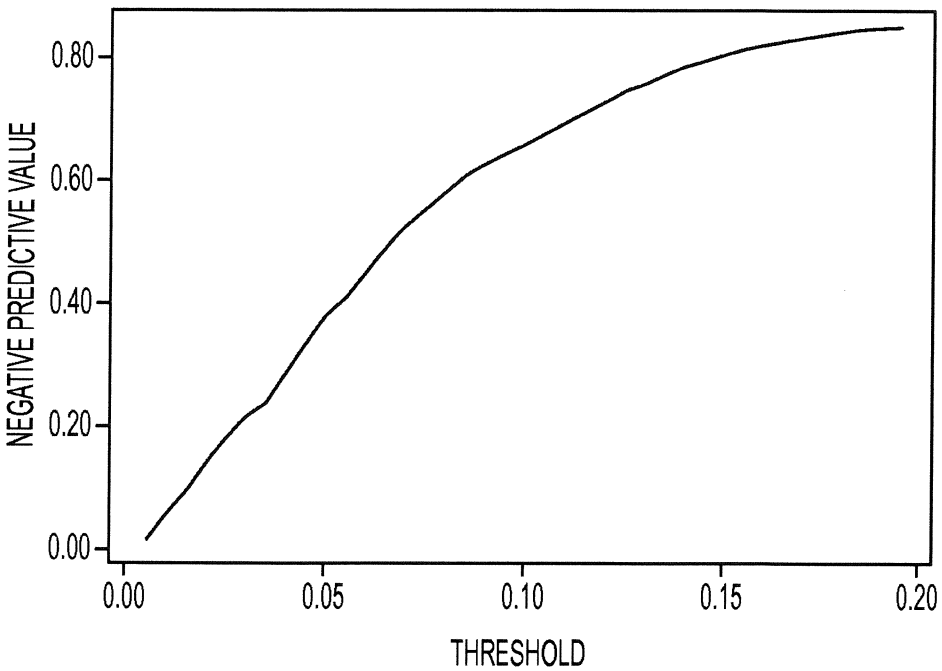

NEGATIVE PREDICTIVE VALUE
0.80
0.60
0.40
0.20
0.00
0.00
0.05
0.10
0.15
0.20
THRESHOLD

FIG. 8B

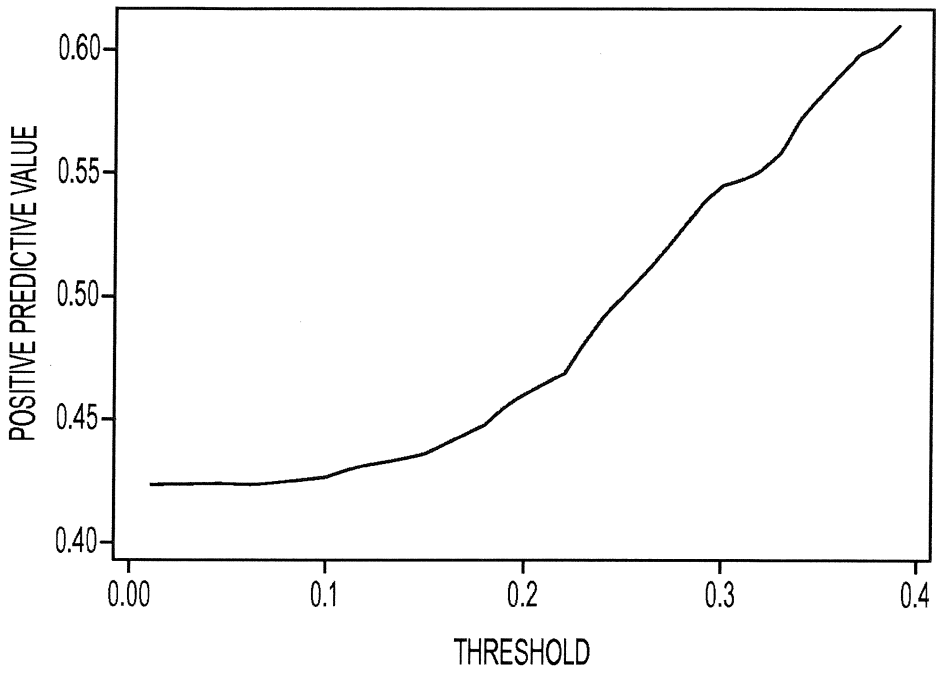

POSITIVE PREDICTIVE VALUE
0.60
0.55
0.50
0.45
0.40
0.00
0.1
0.2
0.3
0.4
THRESHOLD

FIG. 9A

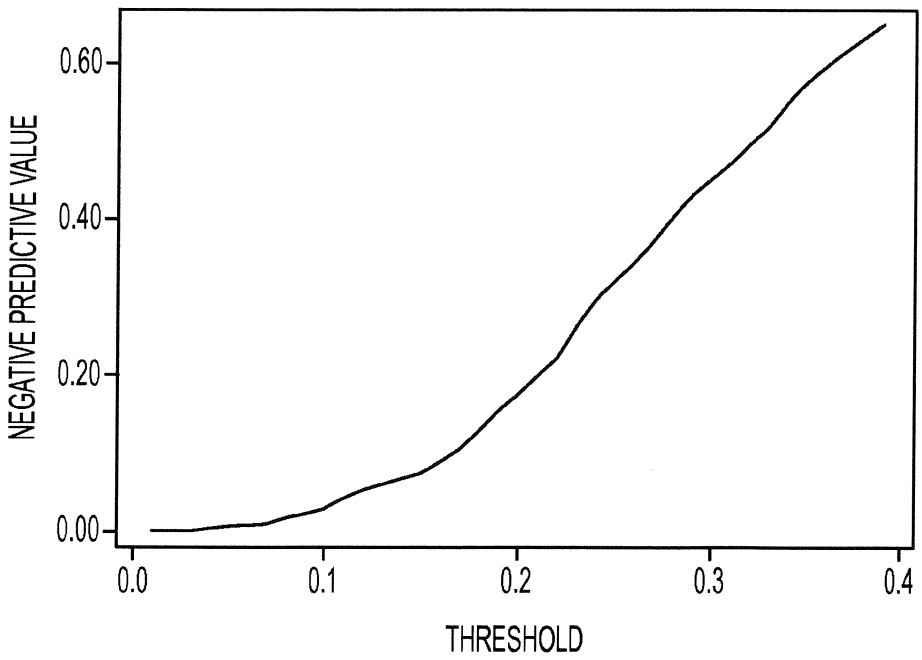

NEGATIVE PREDICTIVE VALUE
0.60
0.40
0.20
0.00
0.0
0.1
0.2
0.3
0.4
THRESHOLD

FIG. 9B

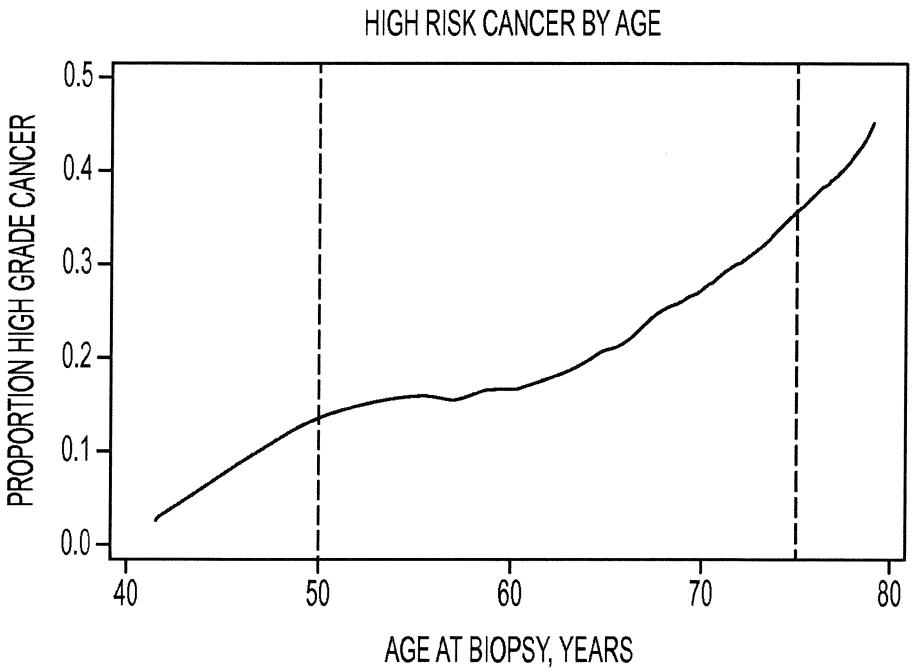

HIGH RISK CANCER BY AGE
PROPORTION HIGH GRADE CANCER
0.5
0.4
0.3
0.2
0.1
0.0
40
50
60
70
80
AGE AT BIOPSY, YEARS

FIG. 10

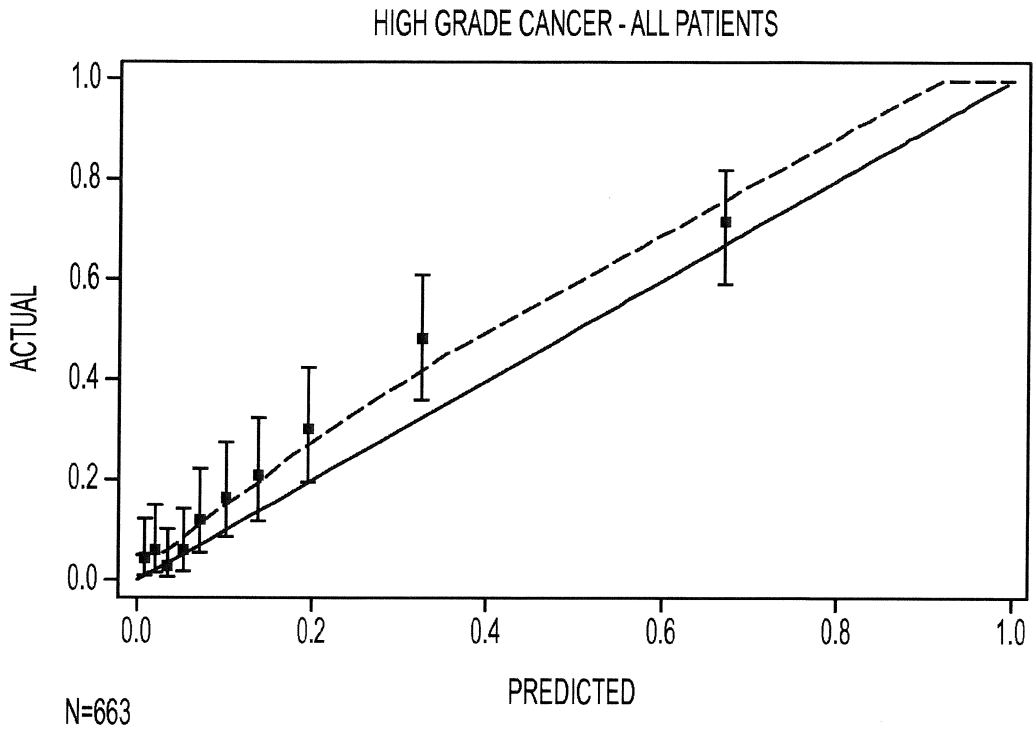


FIG. 11A

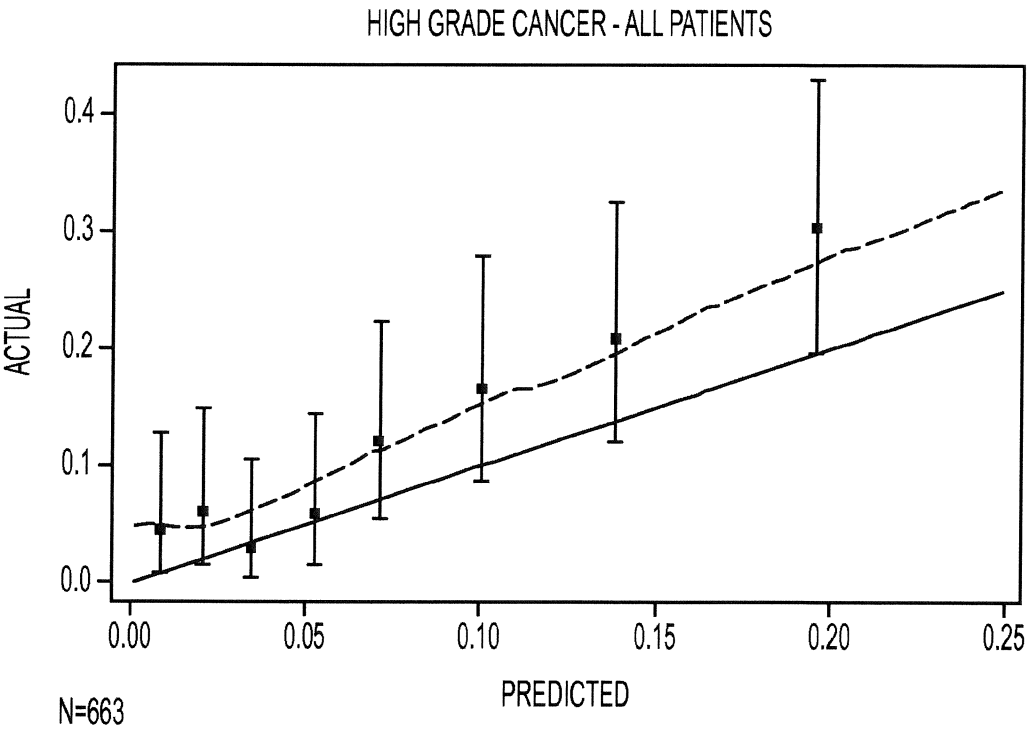


FIG. 11B

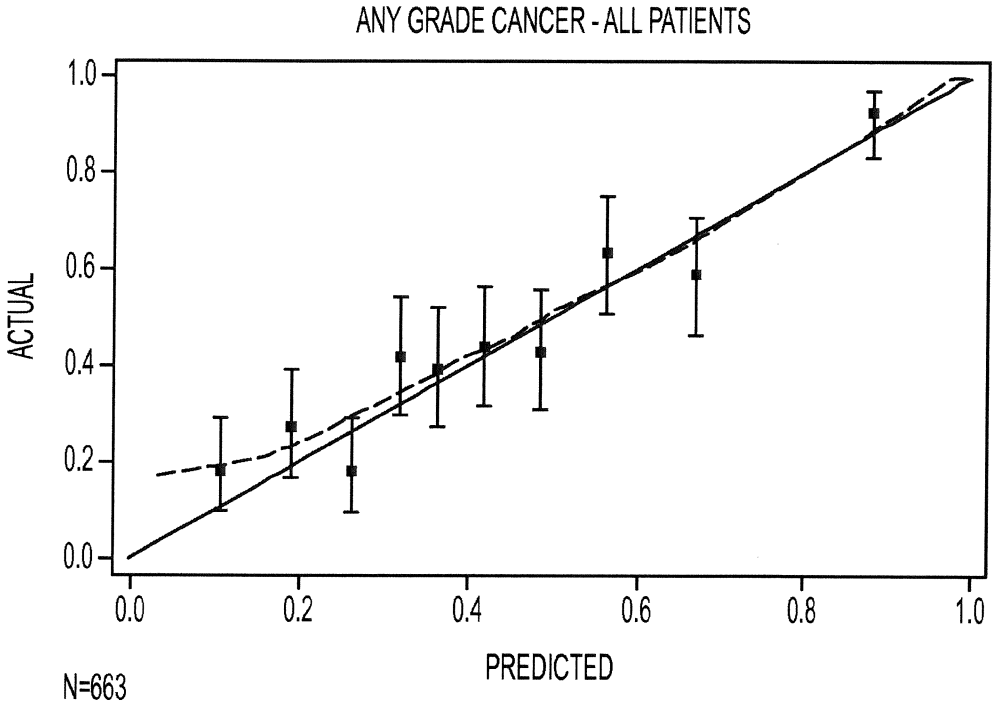

ANY GRADE CANCER - ALL PATIENTS
ACTUAL
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.2
0.4
0.6
0.8
1.0
PREDICTED
N=663

FIG. 11C

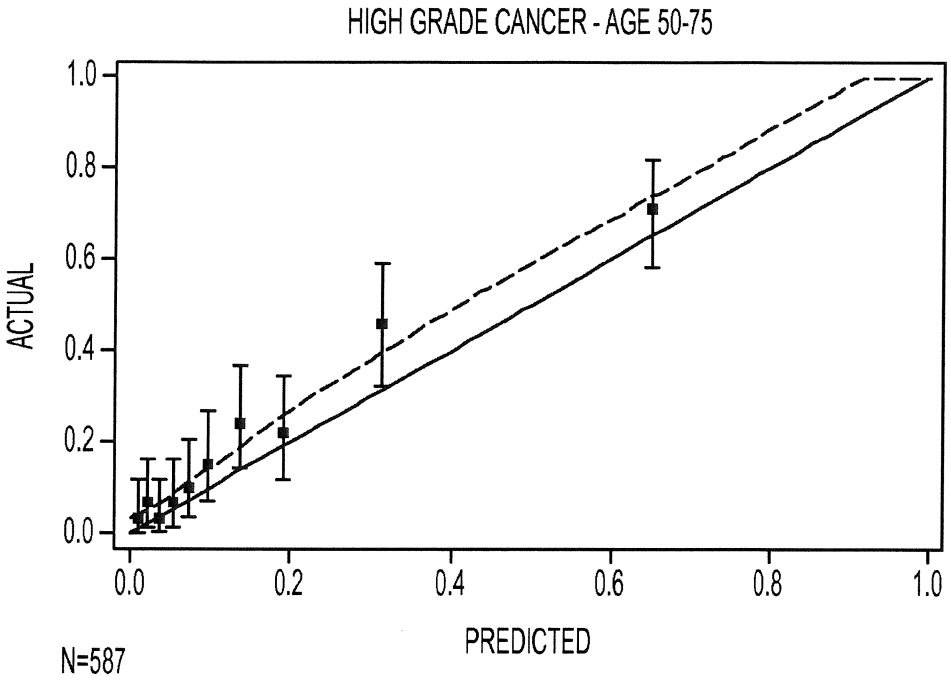


FIG. 12A

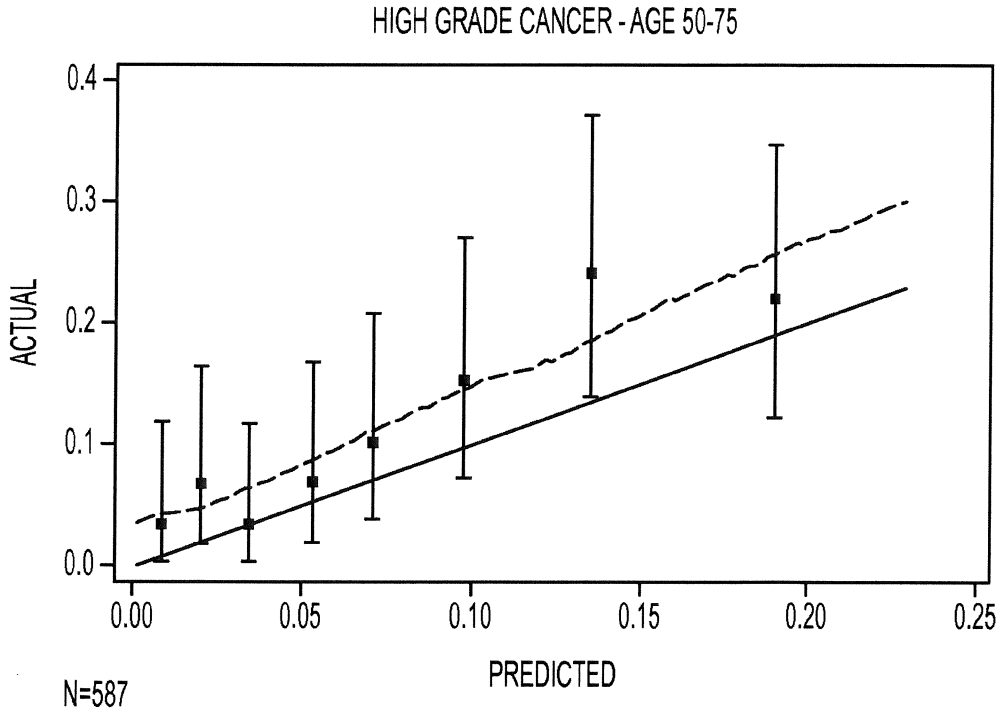


FIG. 12B

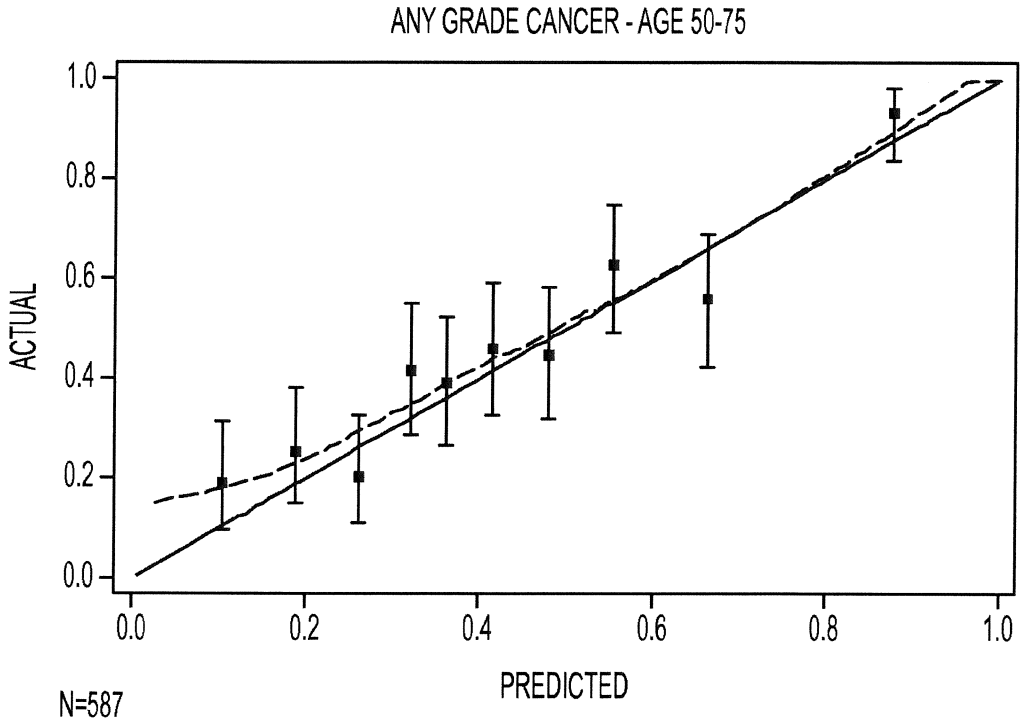

ANY GRADE CANCER - AGE 50-75
ACTUAL
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.2
0.4
0.6
0.8
1.0
PREDICTED
N=587

FIG. 12C

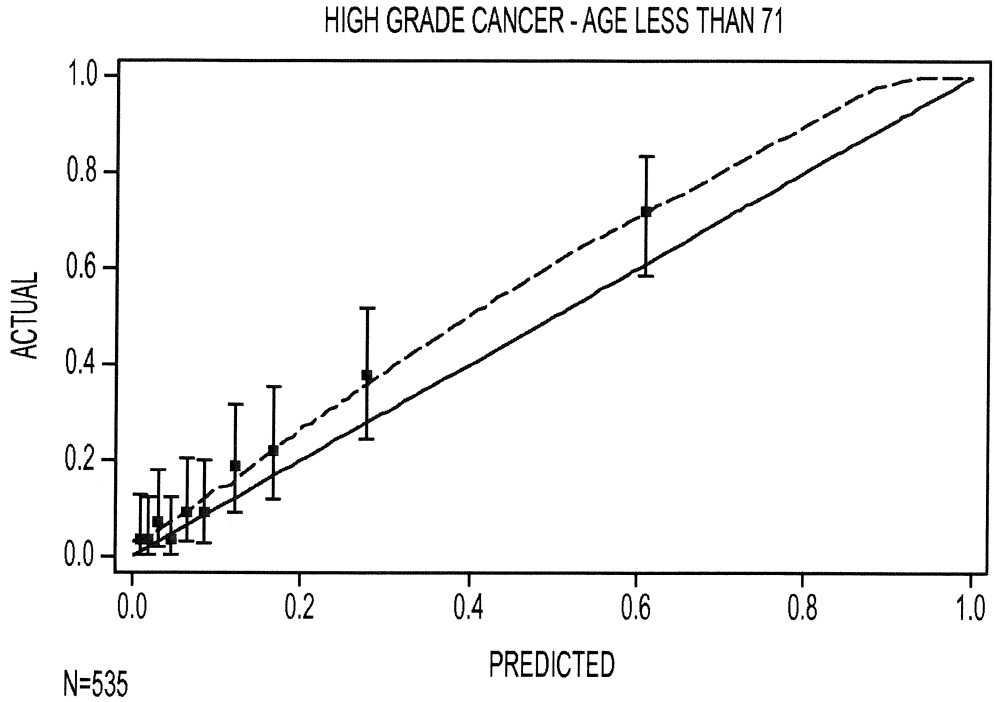


FIG. 13A

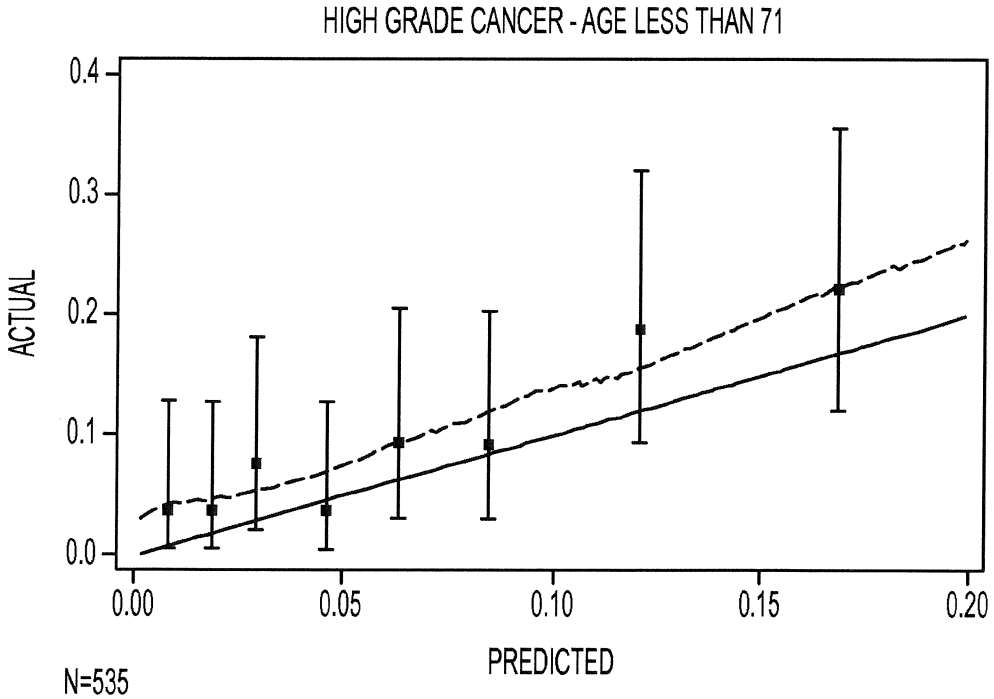


FIG. 13B

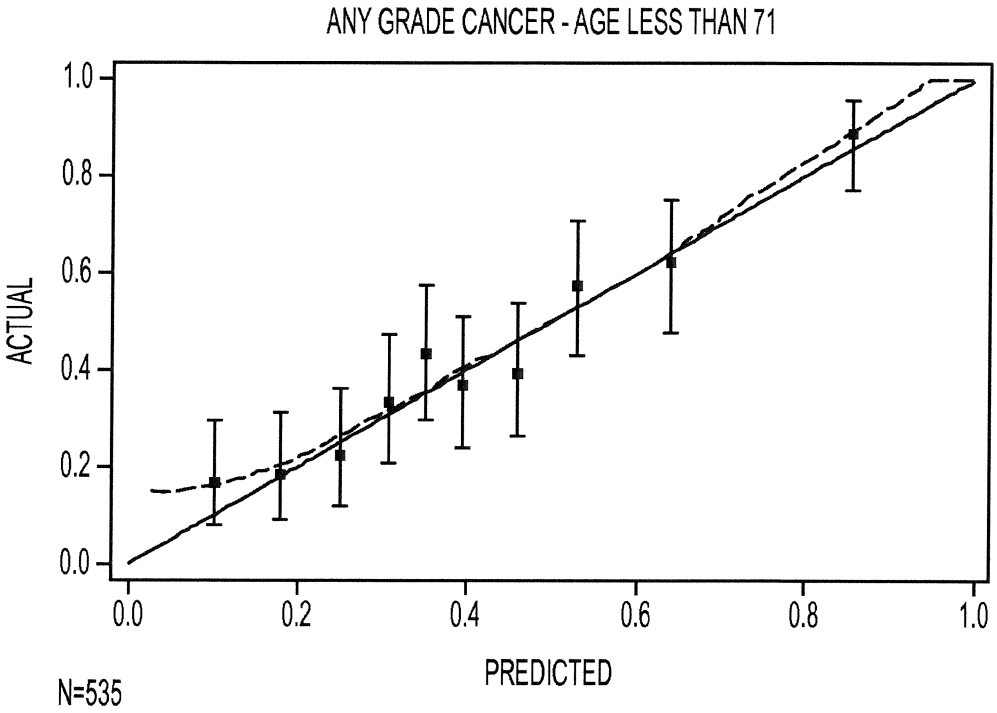

ANY GRADE CANCER - AGE LESS THAN 71
ACTUAL
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.2
0.4
0.6
0.8
1.0
PREDICTED
N=535

FIG. 13C

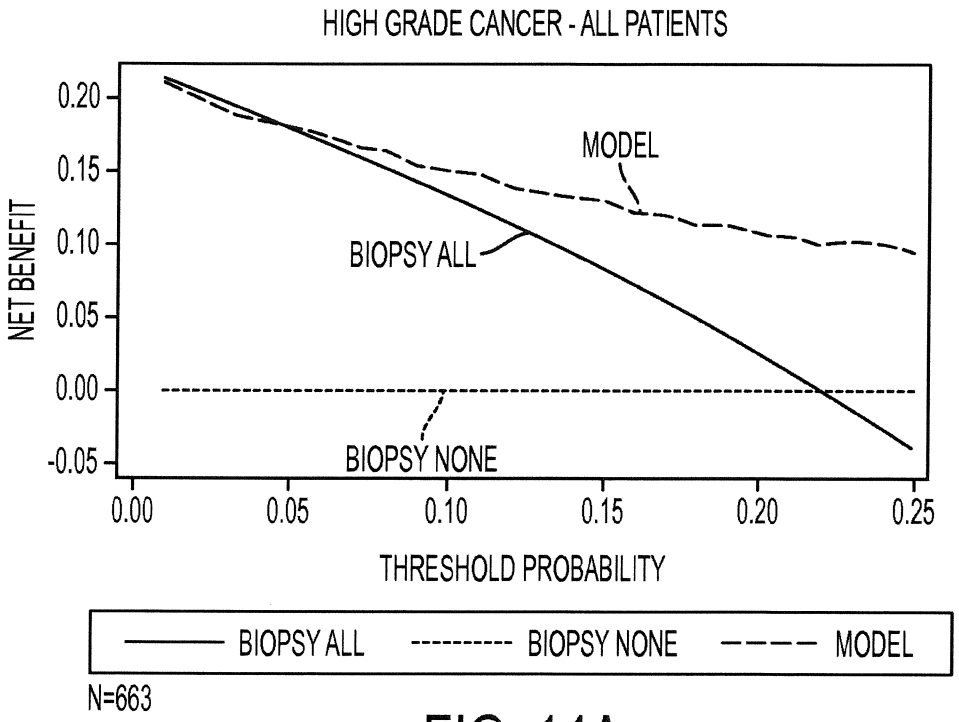


FIG. 14A

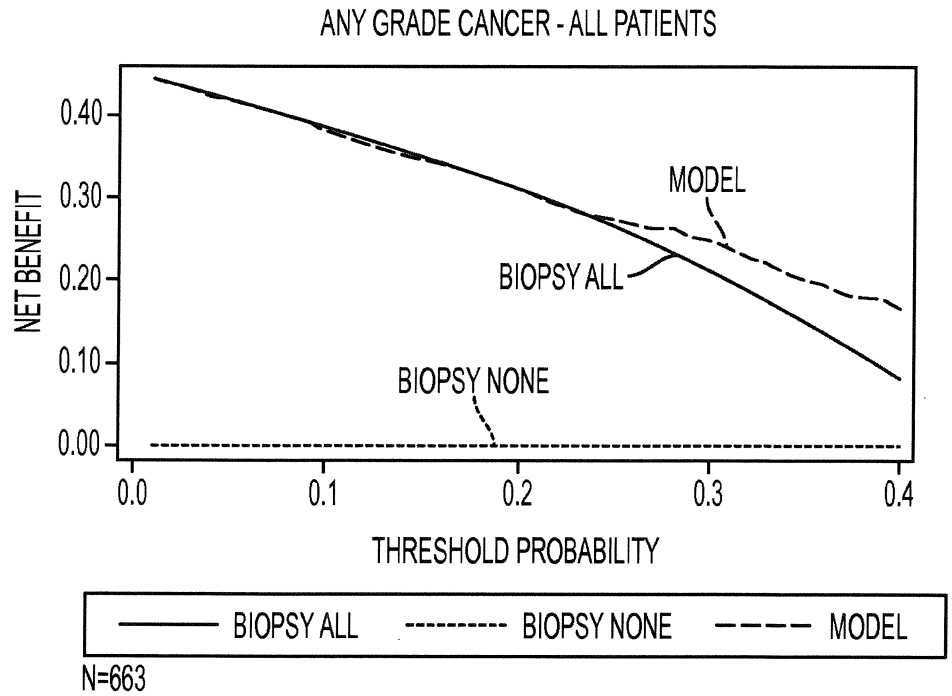


FIG. 14B

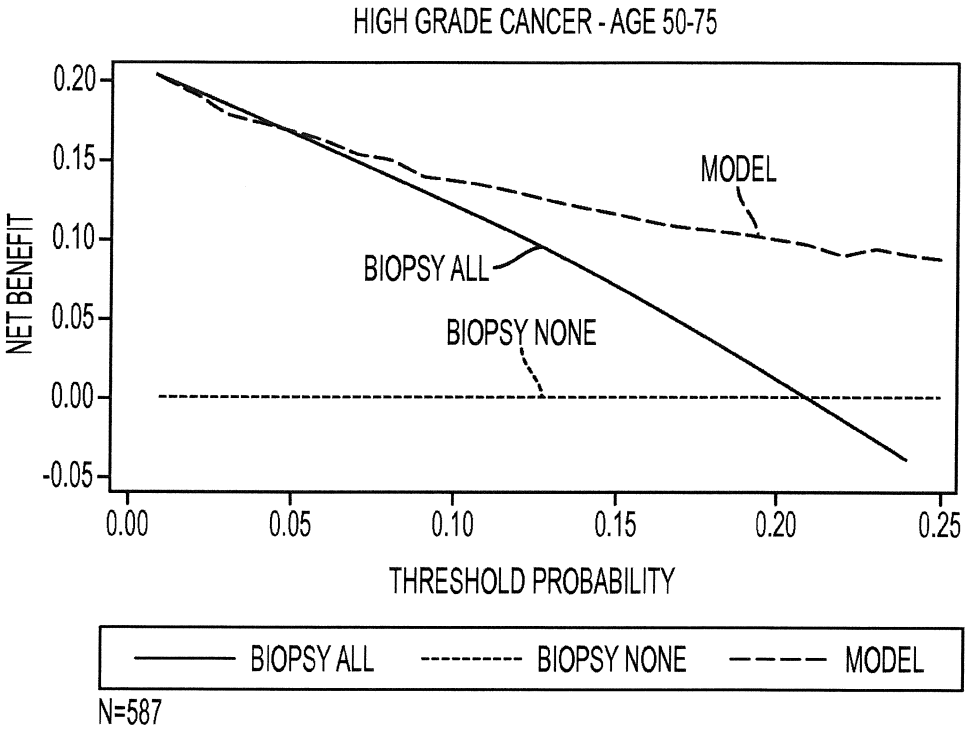


FIG. 15A

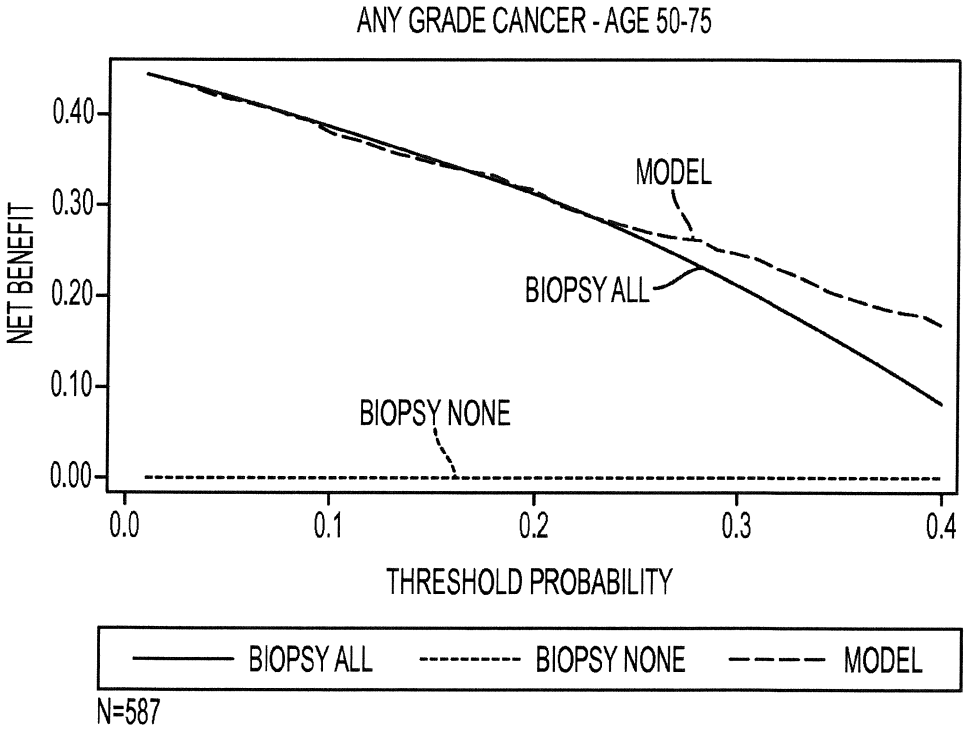


FIG. 15B

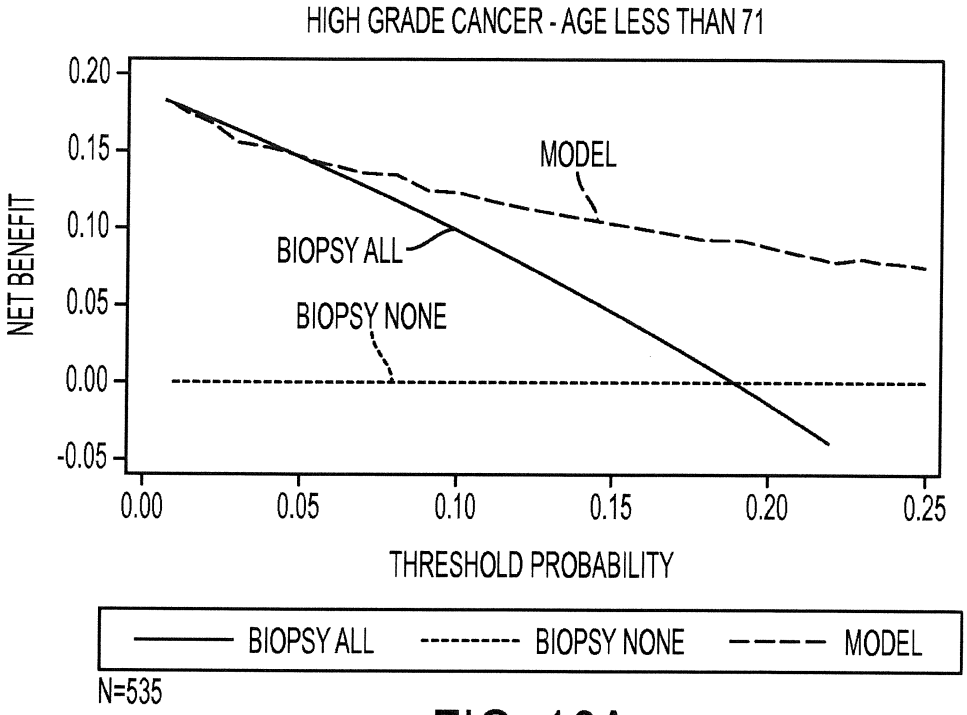


FIG. 16A

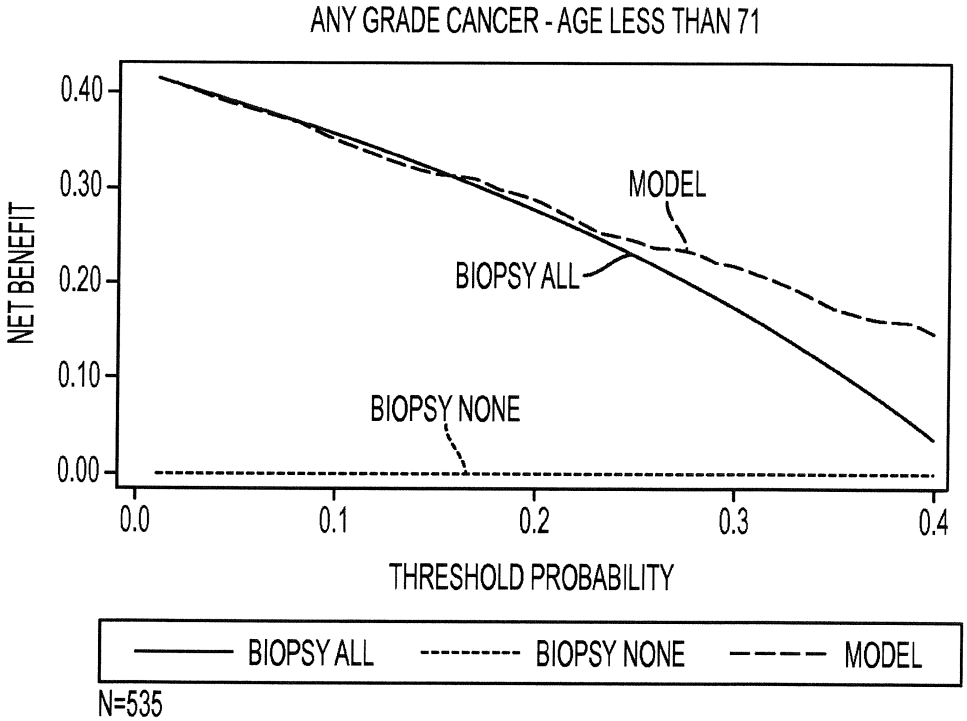


FIG. 16B