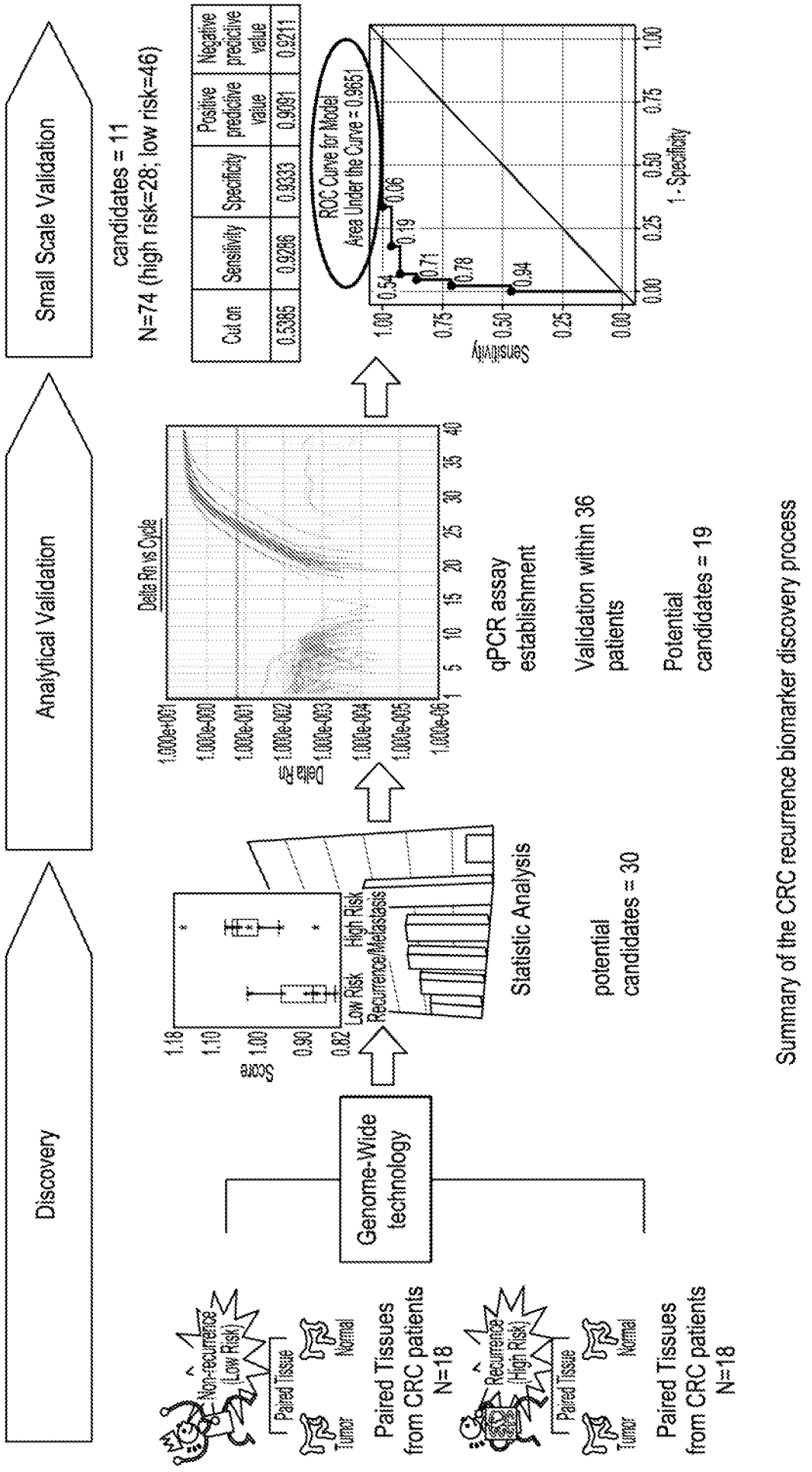


Summary of the CRC recurrence biomarker discovery process

Fig.1

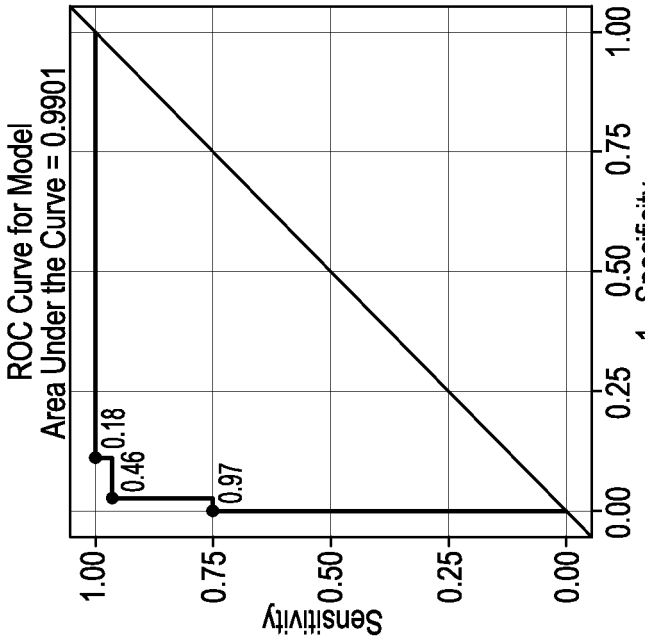


Fig.2-1

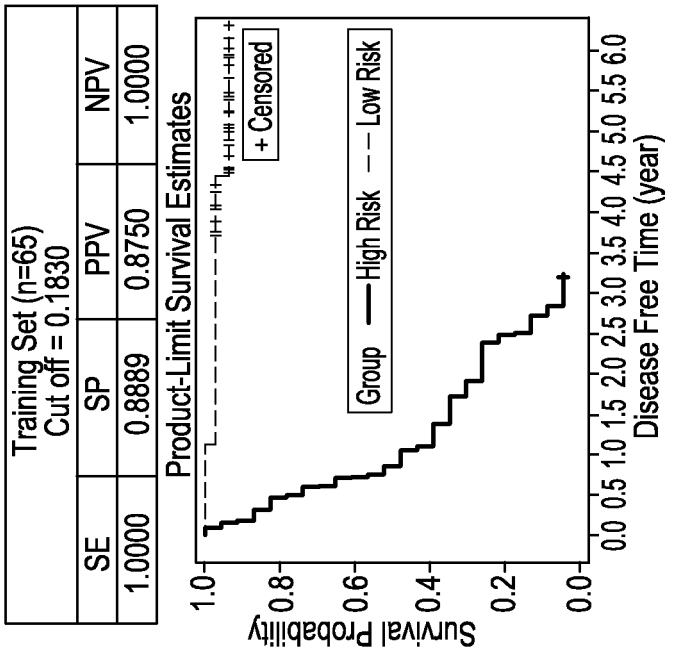


Fig.2-1a

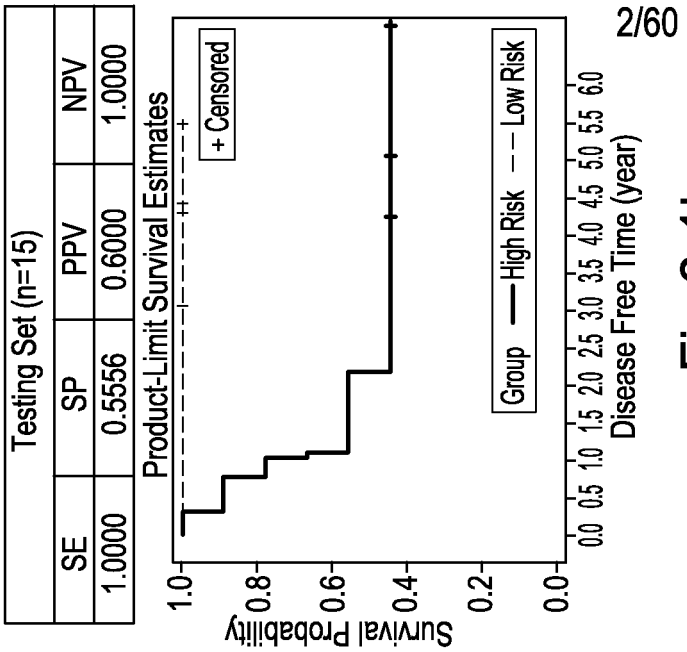


Fig.2-1b

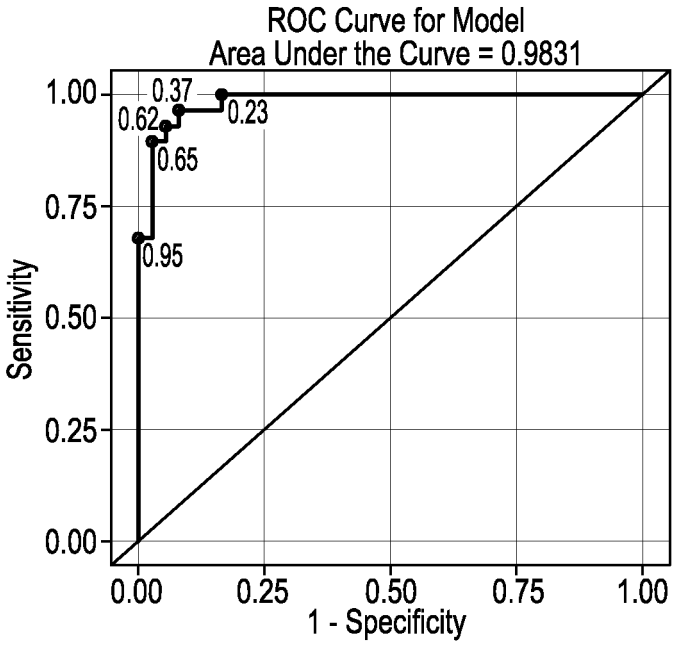


Fig.3-1

Training Set (n=65) Cut off = 0.2331			
SE	SP	PPV	NPV
0.75	1.0000	1.0000	0.8372

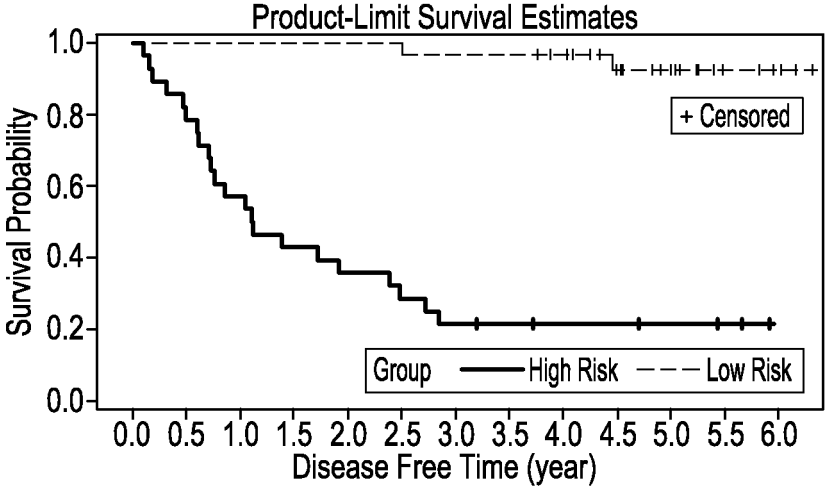


Fig.3-1a

Testing Set (n=15)			
SE	SP	PPV	NPV
0.5556	1.0000	1.0000	0.6

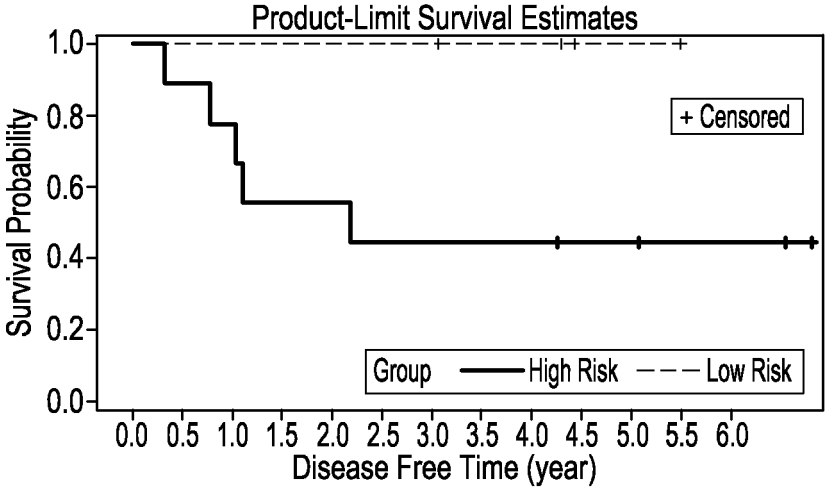


Fig.3-1b

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 16.8612 - 0.6640 \times (hsa\text{-}miR\text{-}518b(Tumor)) - 1.0130 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal))$ .....[formula1]

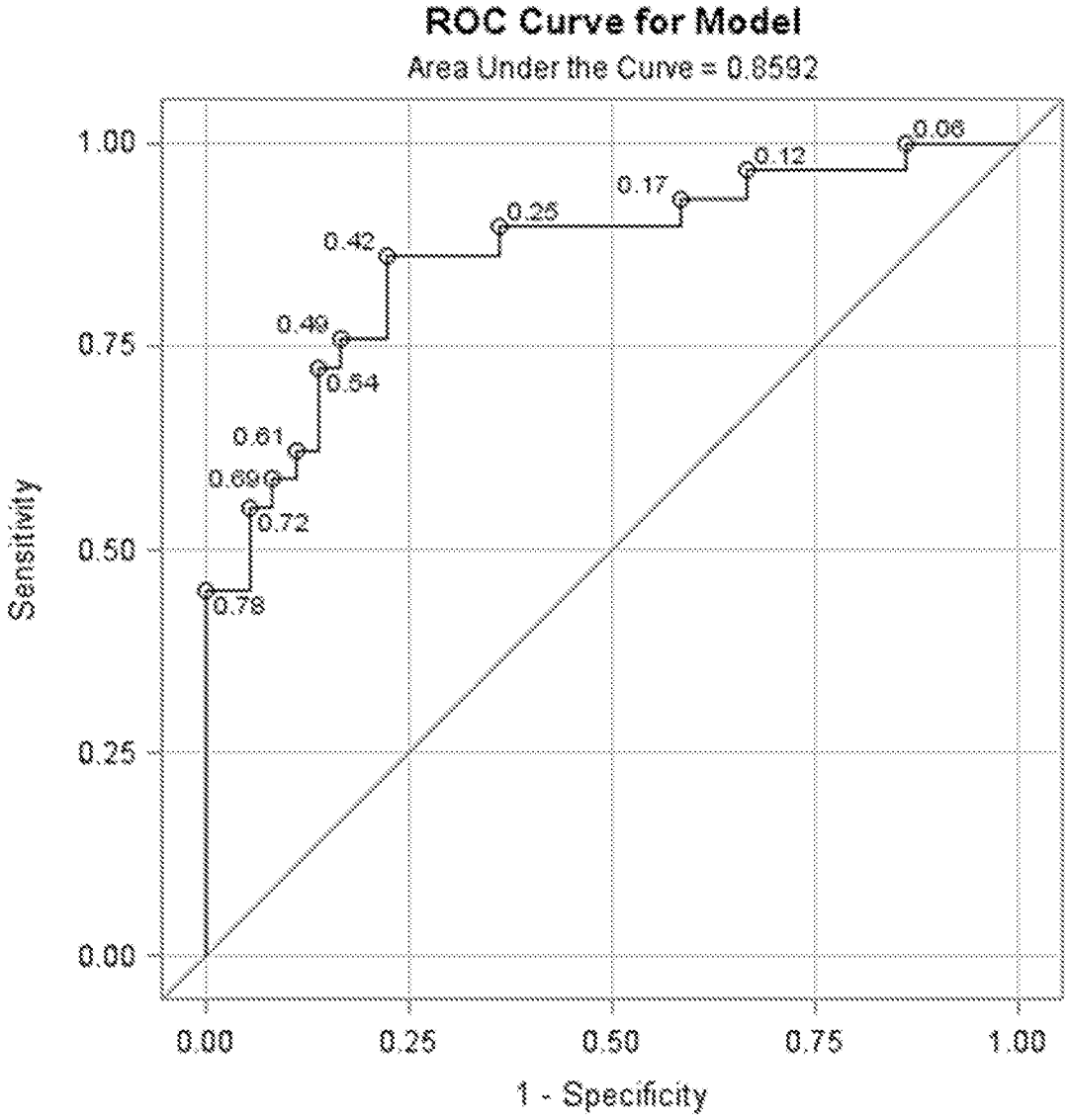


Fig.4

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 25.6050\text{-}0.8781 \times (hsa\text{-}miR\text{-}629(Normal))\text{-}1.1826 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal))$

$\text{-}0.3721 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))$ .....[formula2]

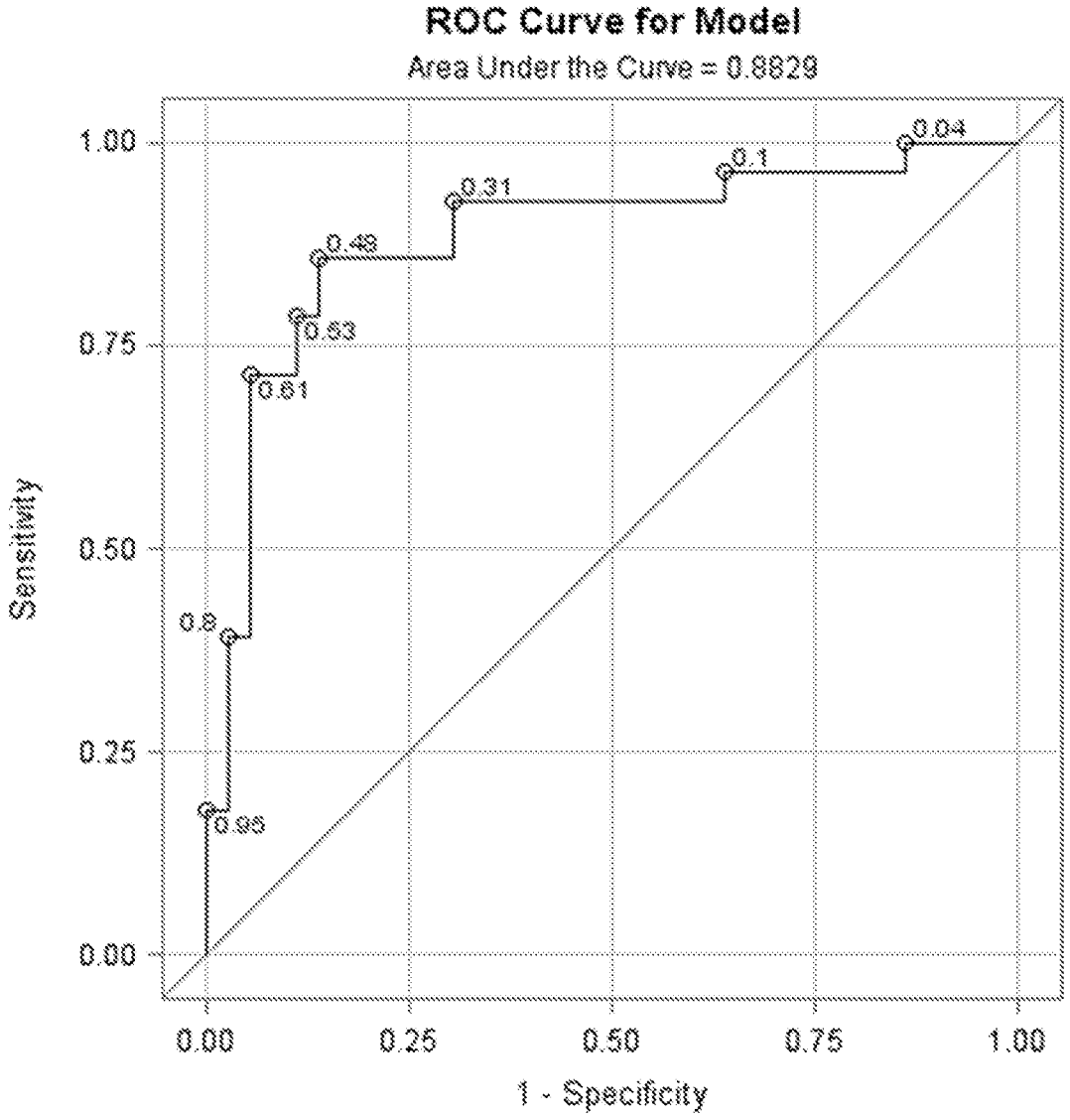


Fig.5

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 25.7065 - 0.4375 \times (hsa\text{-}miR\text{-}518b(Tumor)) - 0.6637 \times (hsa\text{-}miR\text{-}629(Normal)) - 0.9932 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 0.3170 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))$ .....[formula3]

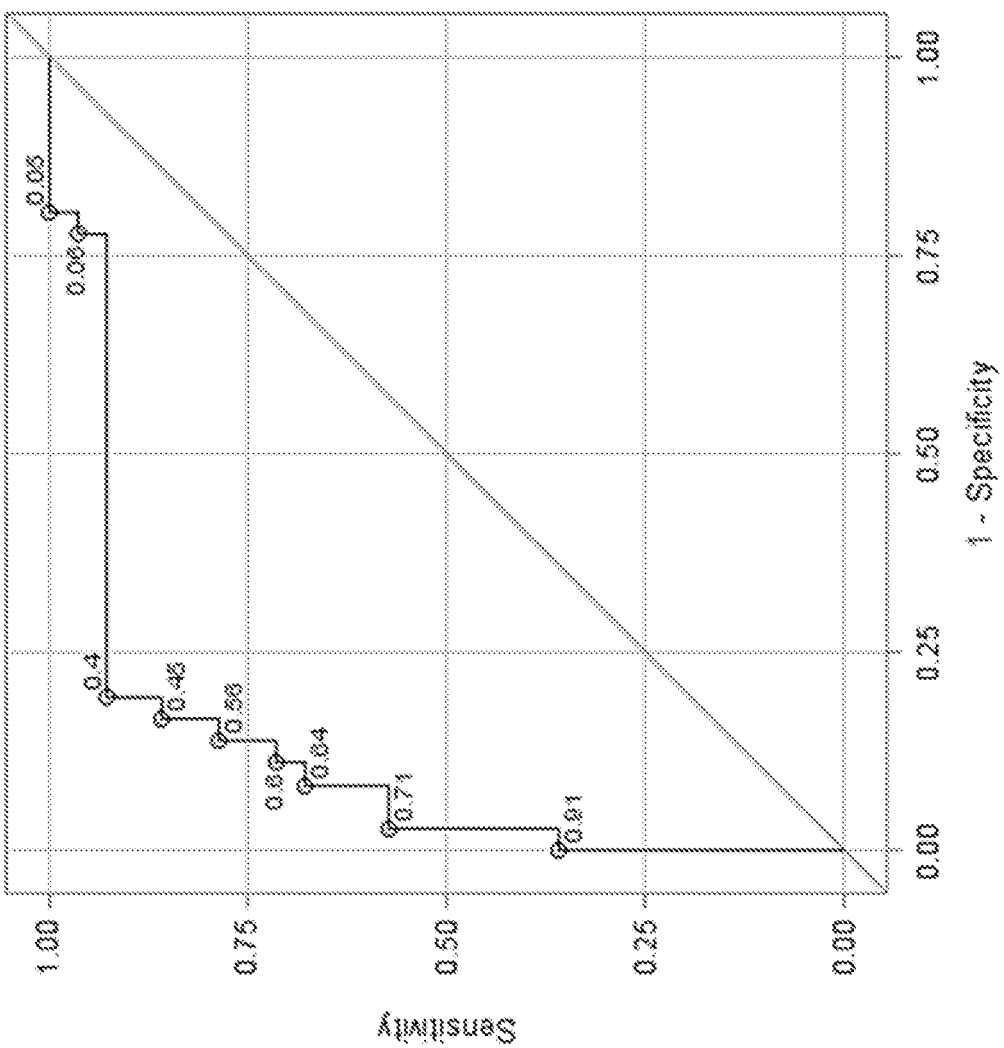


Fig.6

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 26.1881 - 0.3445 \times (hsa\text{-}miR\text{-}518b(Tumor)) - 0.7718 \times (hsa\text{-}miR\text{-}629(Normal))$
$- 0.8979 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 0.2791 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))$
$- 0.1839 \times (hsa\text{-}miR\text{-}223*(Tumor))$ .....[formula4]

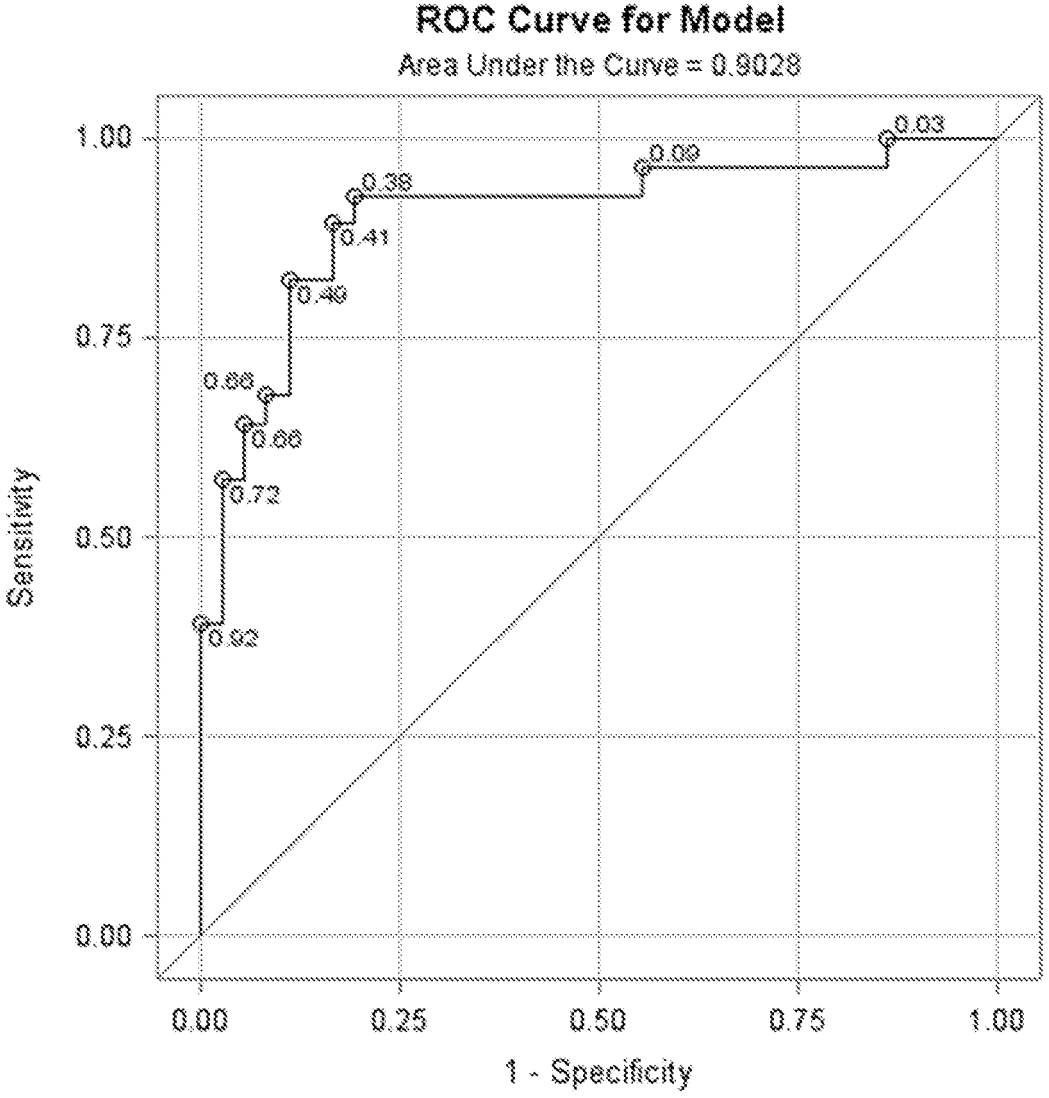


Fig.7

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 56.4146 - 2.9645 \times (hsa\text{-}miR\text{-}518b(Tumor)) - 0.7736 \times (hsa\text{-}miR\text{-}629(Normal)) - 0.8220 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 0.2785 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor)) - 3.1742 \times (hsa\text{-}miR\text{-}223 * (Tumor)) + 0.2511 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}223 * (Tumor))\}$ .....[formula5]

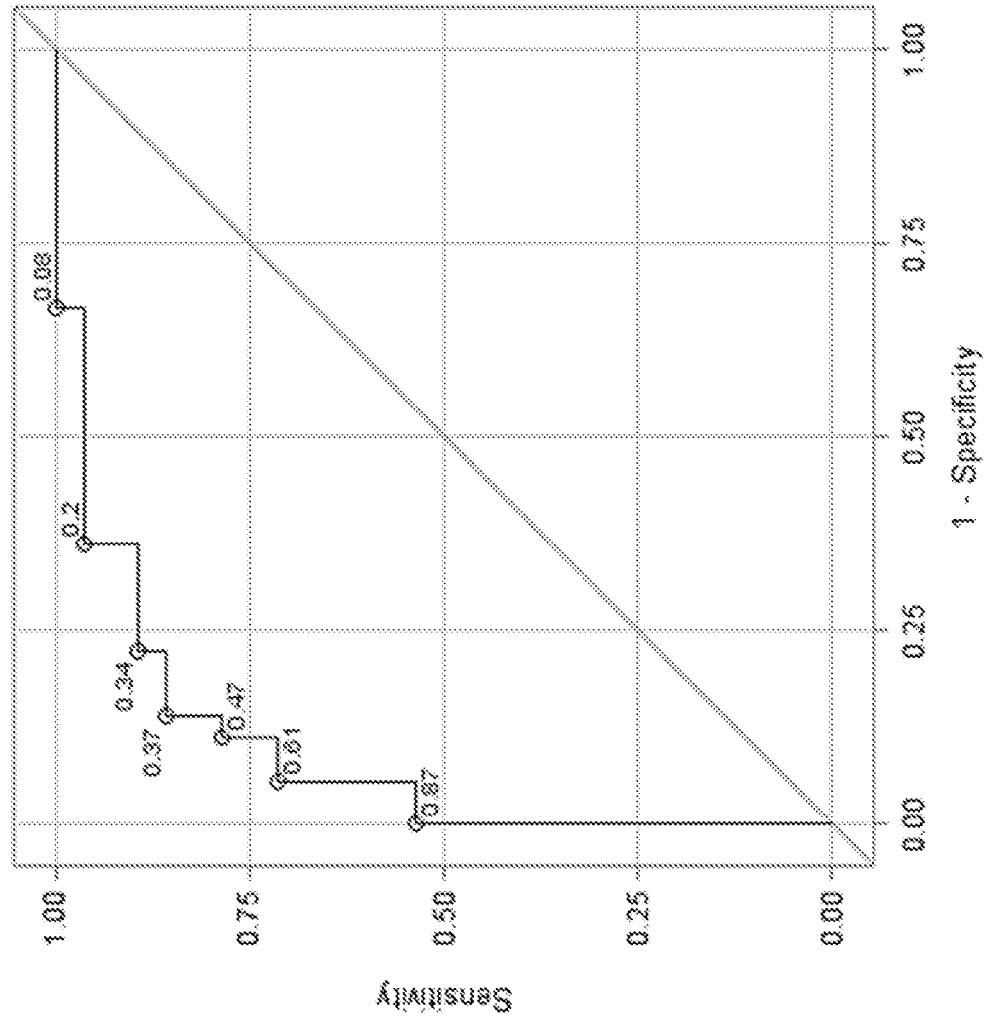


Fig.8

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 20.5432 + 0.4233 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 2.9291 \times (hsa\text{-}miR\text{-}629(Normal))$

$-0.8806 \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal)) - 0.2476 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor))$

$-3.6438 \times (hsa\text{-}miR\text{-}223 * (Tumor)) + 0.2861 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}223 * (Tumor))\}$

$-0.3426 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}629(Normal))\}$.....{formula6}

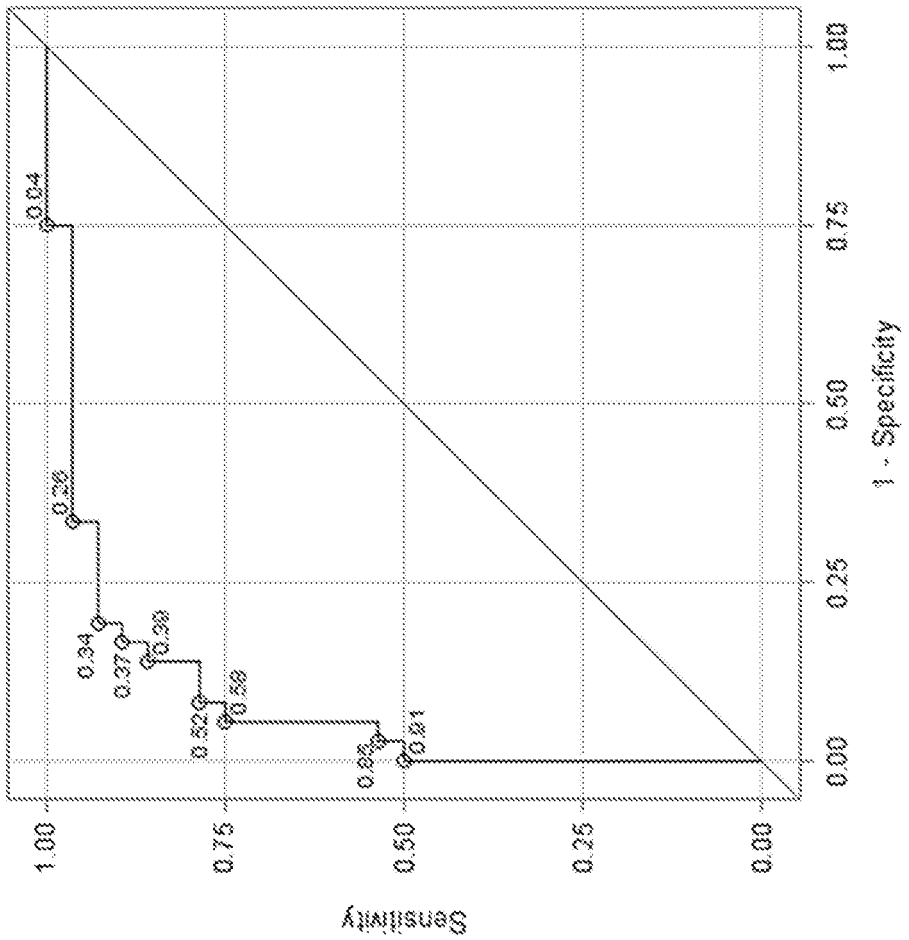


Fig.9

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = -44.9363 + 0.5873 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 10.5237 \times (hsa\text{-}miR\text{-}629(Normal))$
$-1.4451 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 0.2524 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))$
$+ 2.7393 \times (hsa\text{-}miR\text{-}223 * (Tumor)) + 0.3606 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}223 * (Tumor))\}$
$-0.4288 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}629(Normal))\}$
$-0.6967 \times \{(hsa\text{-}miR\text{-}629(Normal) \times (hsa\text{-}miR\text{-}223 * (Tumor))\}$ .....[formula7]

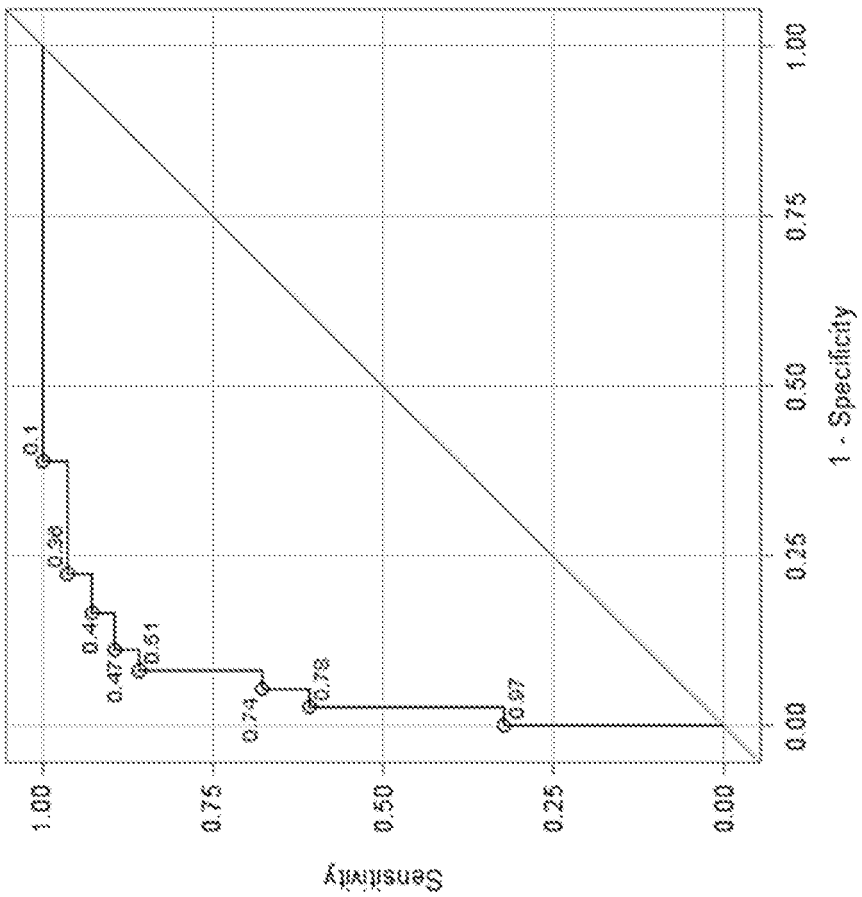


Fig.10

Recurrence score = exp(y)/(1 + exp(y)); in which y

$$y = -45.9840 + 0.5968 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 11.4389 \times (hsa\text{-}miR\text{-}629(Normal))$$
$$-1.4526 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 1.1848 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))$$
$$+ 3.4236 \times (hsa\text{-}miR\text{-}223*(Tumor)) + 0.3123 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}223*(Tumor)))\}$$
$$-0.4994 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}629(Normal))\}$$
$$-0.7047 \times \{(hsa\text{-}miR\text{-}629(Normal) \times (hsa\text{-}miR\text{-}223*(Tumor))\}$$
$$+ 0.0785 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))\} \text{.....[formula8]}$$

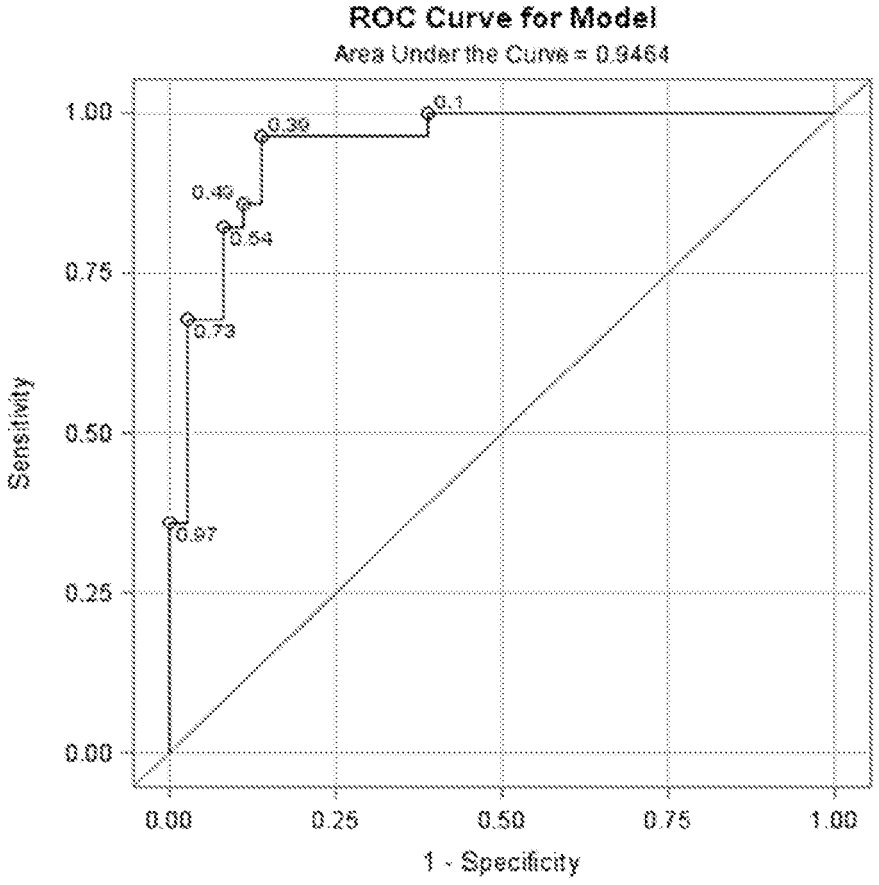


Fig.11

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = -8.0836 + 0.5135 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 10.0536 \times (hsa\text{-}miR\text{-}629(Normal))$

$-5.0937 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 2.6573 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor)) + 2.8590 \times (hsa\text{-}miR\text{-}223 * (Tumor))$

$+ 0.3322 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}629(Normal))\}$

$-0.4003 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}223 * (Tumor))\}$

$-0.6740 \times \{(hsa\text{-}miR\text{-}629(Normal) \times (hsa\text{-}miR\text{-}223 * (Tumor))\}$

$+ 0.2530 \times \{(hsa\text{-}miR\text{-}885\text{-}5p(Normal) \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))\}$ .....[formula9]

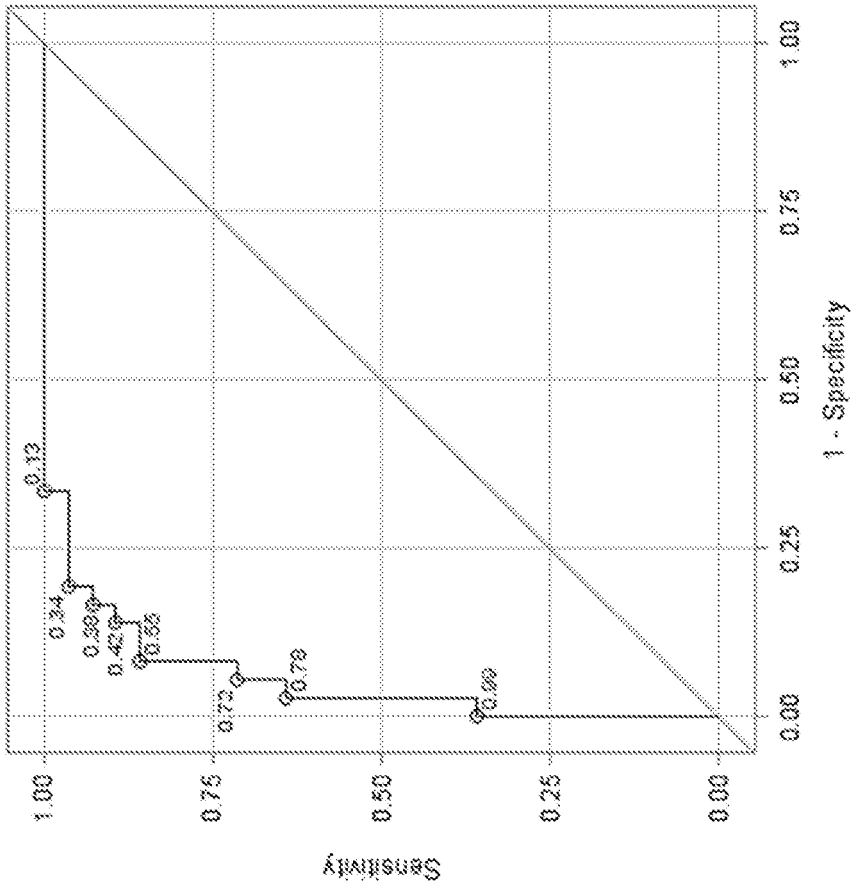


Fig.12

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 25.0054 - 0.8010 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.5236 \times (hsa\text{-}miR\text{-}518b(Normal))$
$+ 0.4554 \times (hsa\text{-}miR\text{-}629(Tumor)) - 1.1600 \times (hsa\text{-}miR\text{-}629(Normal))$
$-1.0224 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 0.3805 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))$.....[formula10]

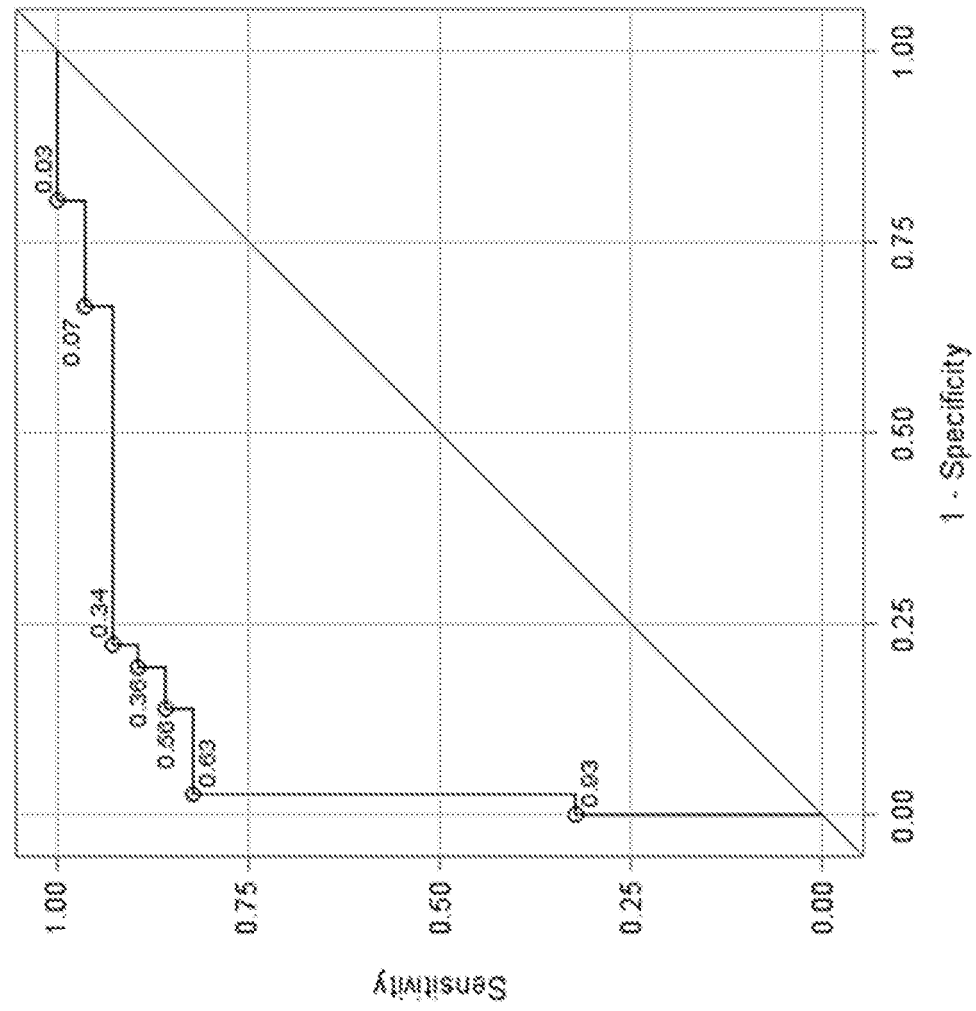


Fig.13

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = -61.6705 + 6.8619 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.6035 \times (hsa\text{-}miR\text{-}518b(Normal)) + 0.4214 \times (hsa\text{-}miR\text{-}629(Tumor))$
$+ 7.2344 \times (hsa\text{-}miR\text{-}629(Normal))\text{-}1.0410 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal))\text{-}0.3520 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))$
$-0.7476 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$.....[formula 11]

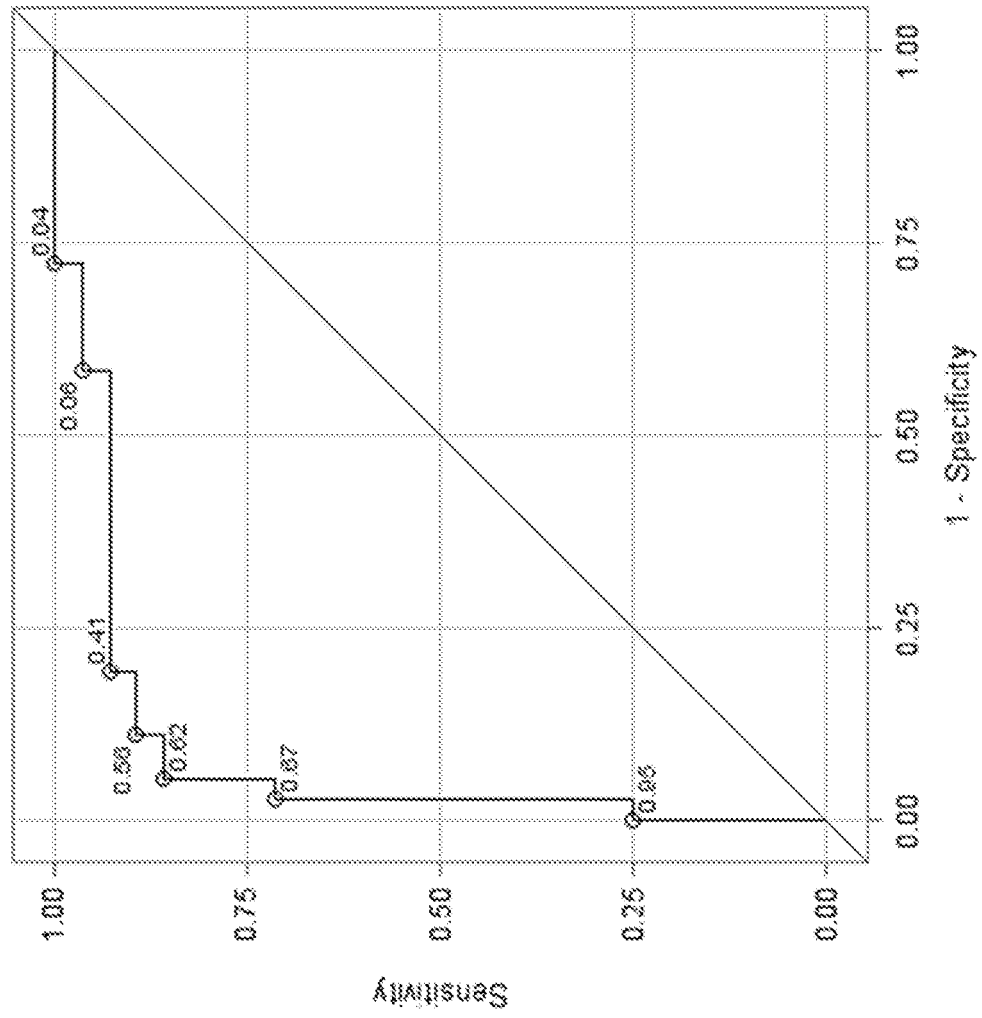


Fig.14

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = -8.3254 - 0.7934 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 3.4682 \times (hsa\text{-}miR\text{-}518b(Normal)) + 0.5218 \times (hsa\text{-}miR\text{-}629(Tumor)) + 2.0833 \times (hsa\text{-}miR\text{-}629(Normal)) - 1.0455 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 0.4284 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor)) - 0.2842 \times \{(hsa\text{-}miR\text{-}518b(Normal)) \times (hsa\text{-}miR\text{-}629(Normal))\}$.....[formula12]

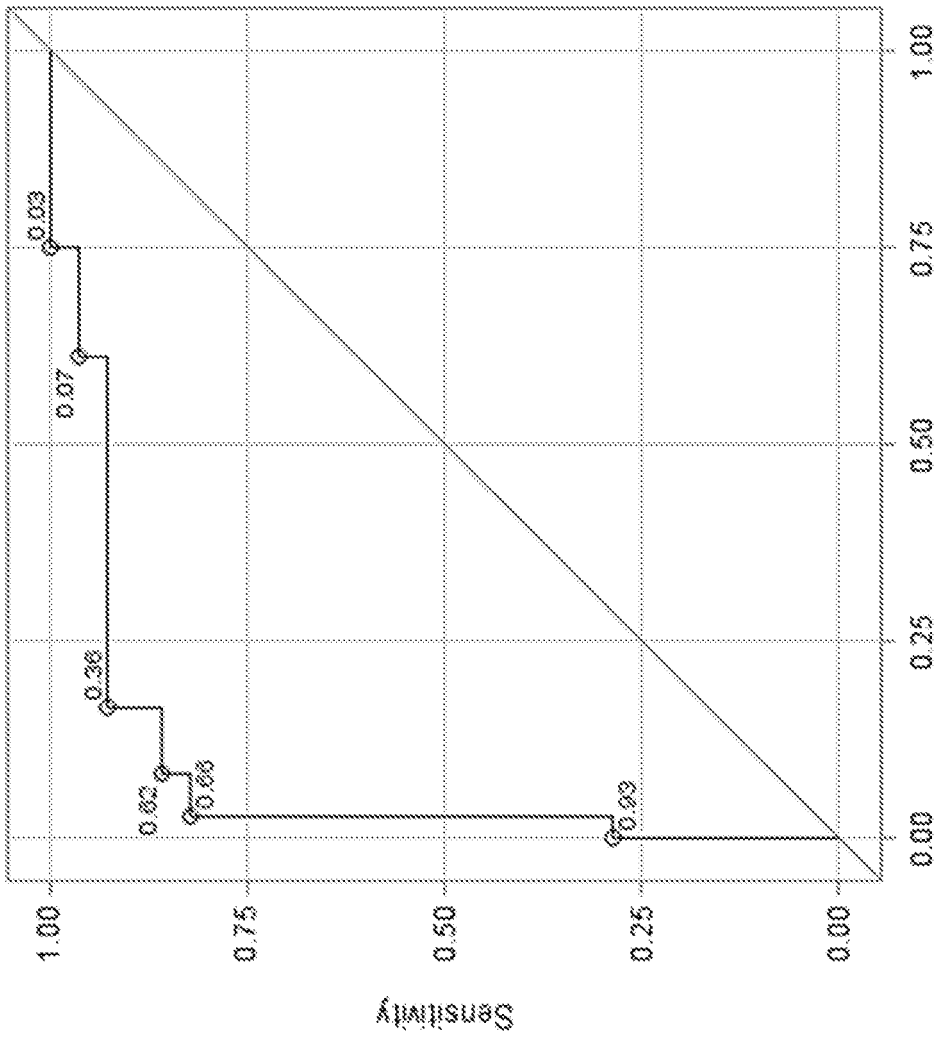


Fig.15

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = -9.2695 + 17.0029 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.6271 \times (hsa\text{-}miR\text{-}518b(Normal)) - 13.5446 \times (hsa\text{-}miR\text{-}629(Tumor))$
$+ 2.9234 \times (hsa\text{-}miR\text{-}629(Normal)) - 1.8225 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 0.4412 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))$
$-1.7187 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$
$+ 1.3433 \times \{(hsa\text{-}miR\text{-}629(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$ .....[formula13]

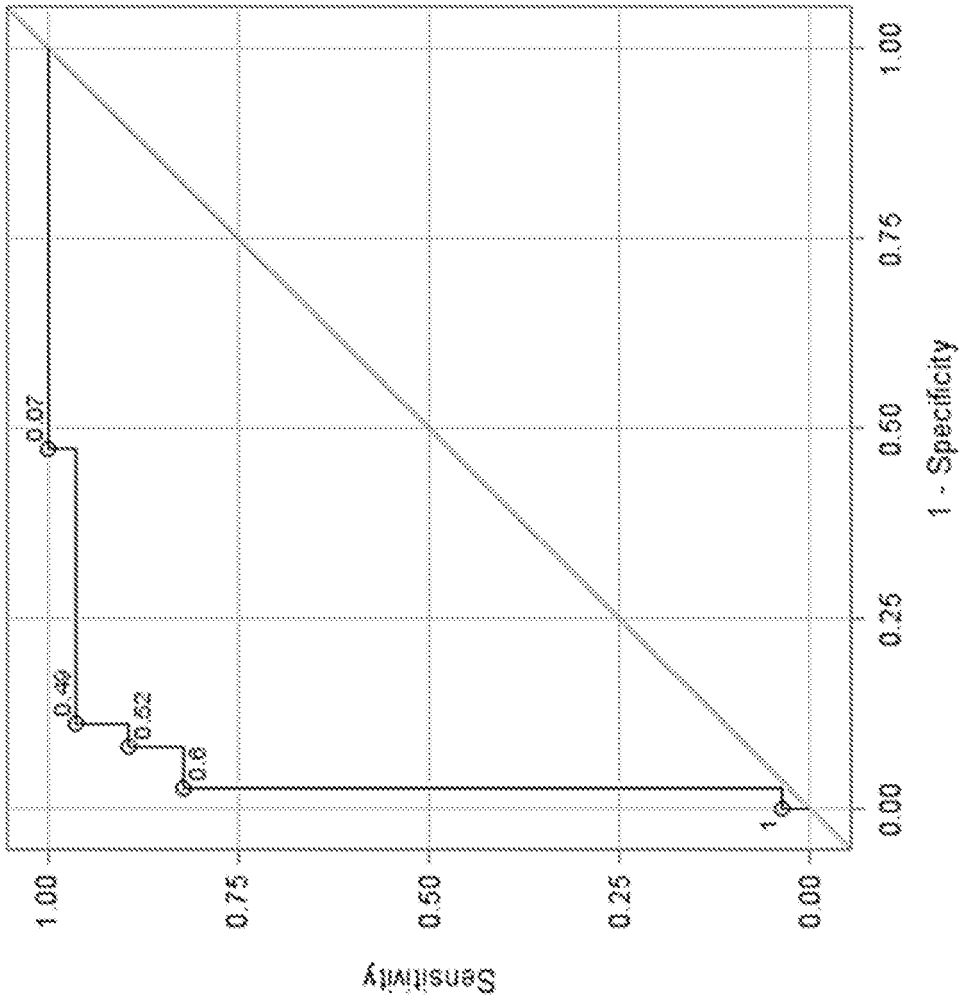


Fig.16

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 30.1620 + 15.5901 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.8399 \times (hsa\text{-}miR\text{-}518b(Normal))$
$-15.4014 \times (hsa\text{-}miR\text{-}629(Tumor)) + 5.8744 \times (hsa\text{-}miR\text{-}629(Normal))$
$-9.4485 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 0.4926 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))$
$-2.1819 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$
$+1.5321 \times \{(hsa\text{-}miR\text{-}629(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$
$+0.6491 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}518b(Normal))\}$.....[formula14]

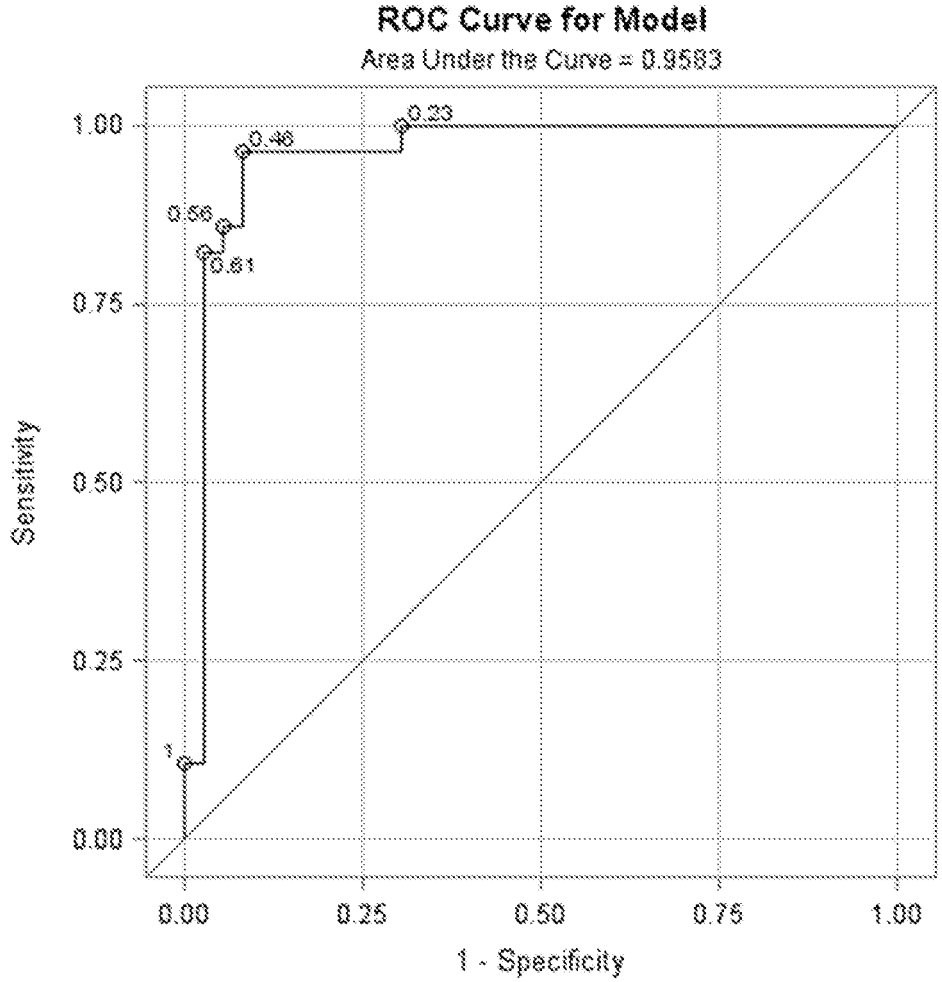


Fig.17

Recurrence score = exp(y)/(1 + exp(y)); in which y

$$y = 29.5776 + 16.6038 \times (hsa\text{-}miR\text{-}518b(Tumor)) - 2.0593 \times (hsa\text{-}miR\text{-}518b(Normal))$$
$$-16.3607 \times (hsa\text{-}miR\text{-}629(Tumor)) + 7.9768 \times (hsa\text{-}miR\text{-}629(Normal))$$
$$-8.0058 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 0.4868 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))$$
$$-2.4573 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$$
$$+1.6249 \times \{(hsa\text{-}miR\text{-}629(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$$
$$+0.2507 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}518b(Normal))\}$$
$$+0.5228 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal))\} \quad \text{.....[formula15]}$$

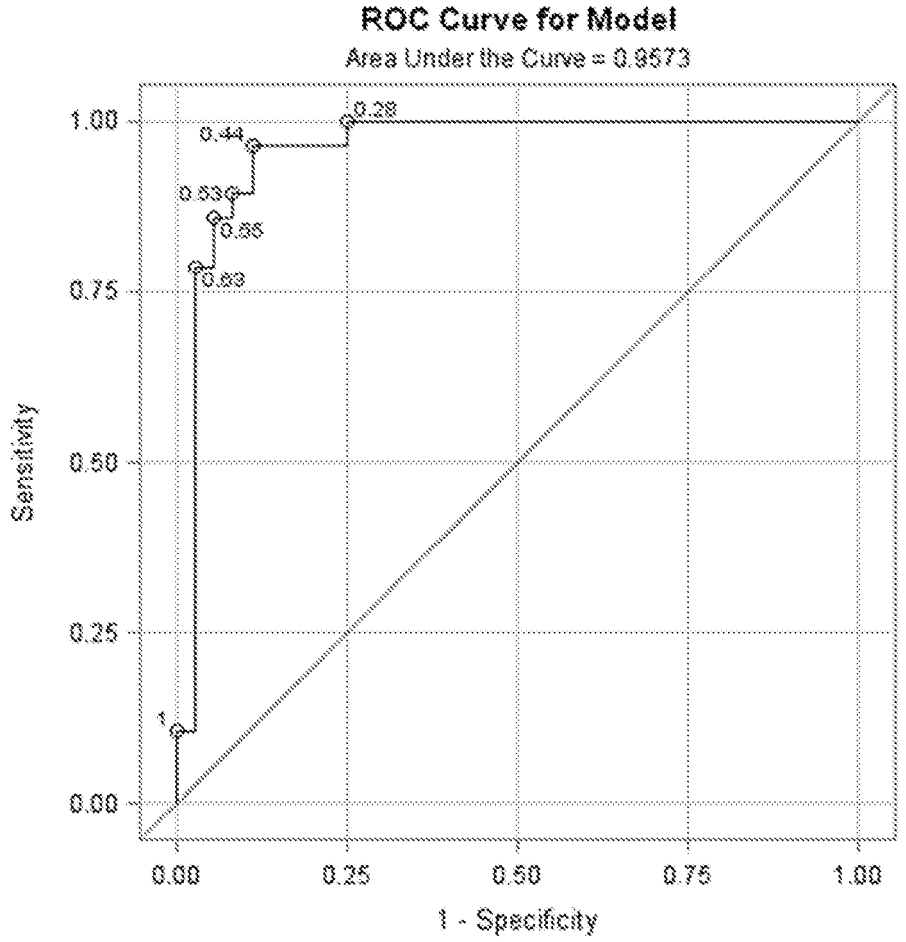


Fig.18

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 15.8547 + 19.7928 \times (hsa\text{-}miR\text{-}518b(Tumor)) - 4.0096 \times (hsa\text{-}miR\text{-}518b(Normal))$

$-14.4251 \times (hsa\text{-}miR\text{-}629(Tumor)) + 10.5888 \times (hsa\text{-}miR\text{-}629(Normal)) - 6.8641 \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal))$

$-3.7748 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor)) - 2.4644 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$

$+1.4285 \times \{(hsa\text{-}miR\text{-}629(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$

$+0.4009 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}518b(Normal))\}$

$+0.3535 \times \{(hsa\text{-}miR\text{-}885\text{-}5\,p(Normal)) \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor))\}$ .....[formula16]

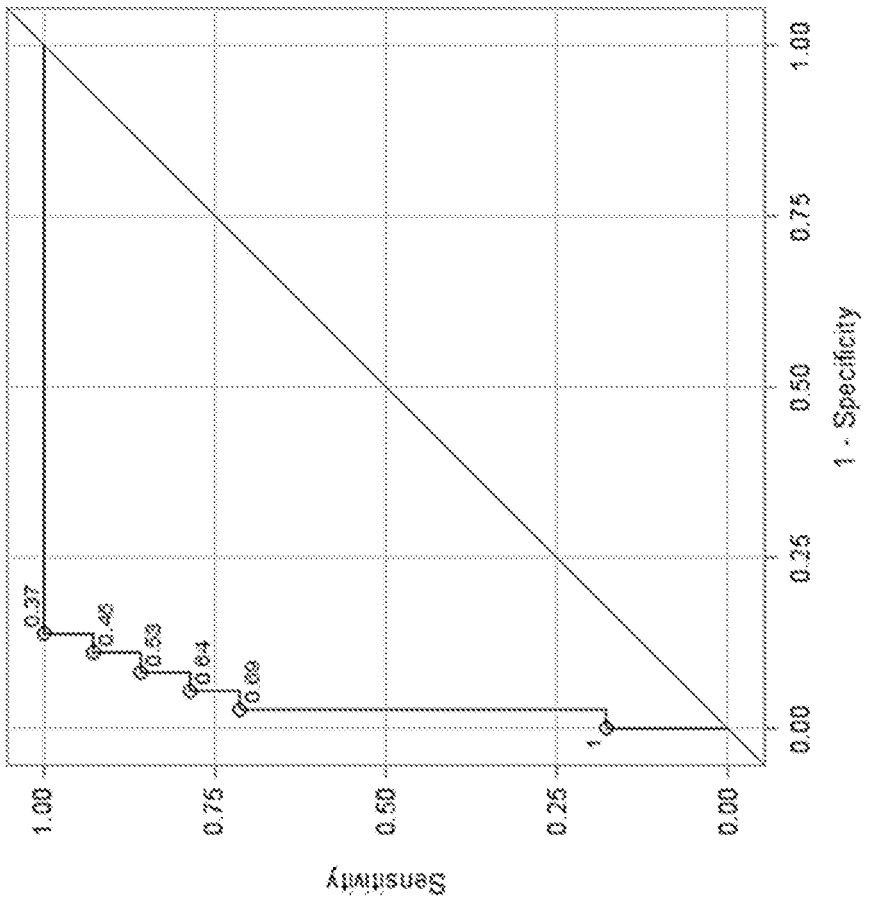


Fig.19

Recurrence score = exp(y)/(1 + exp(y)); in which y

$$y = 25.2101 - 0.8181 \times (\textit{hsa-miR-518b(Tumor)}) + 0.5577 \times (\textit{hsa-miR-518b(Normal)}) + 0.4613 \times (\textit{hsa-miR-629(Tumor)}) - 1.1740 \times (\textit{hsa-miR-629(Normal)}) - 1.0339 \times (\textit{hsa-miR-885-5p(Normal)}) - 0.3634 \times (\textit{hsa-mir-139-3p(Tumor)}) - 0.0461 \times (\textit{hsa-mir-139-3p(Normal)}) \quad \text{.....[formula17]}$$

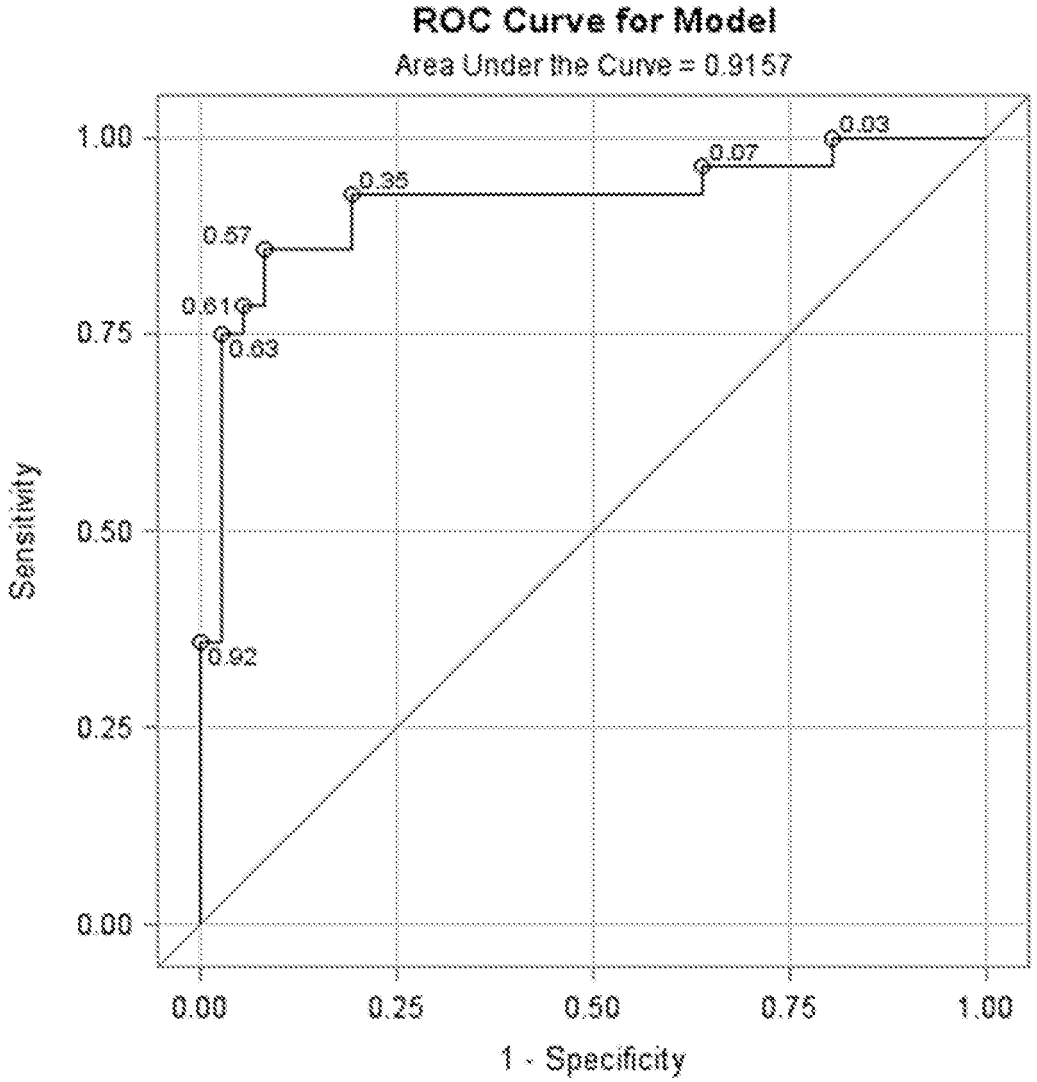


Fig.20

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = -61.7241 + 6.8625 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.6350 \times (hsa\text{-}miR\text{-}518b(Normal))$

$+ 0.4261 \times (hsa\text{-}miR\text{-}629(Tumor)) + 7.2459 \times (hsa\text{-}miR\text{-}629(Normal)) - 1.0519 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal))$

$-0.3365 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor)) - 0.0403 \times (hsa\text{-}mir\text{-}139\text{-}3p(Normal))$

$-0.7493 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$.....[formula18]

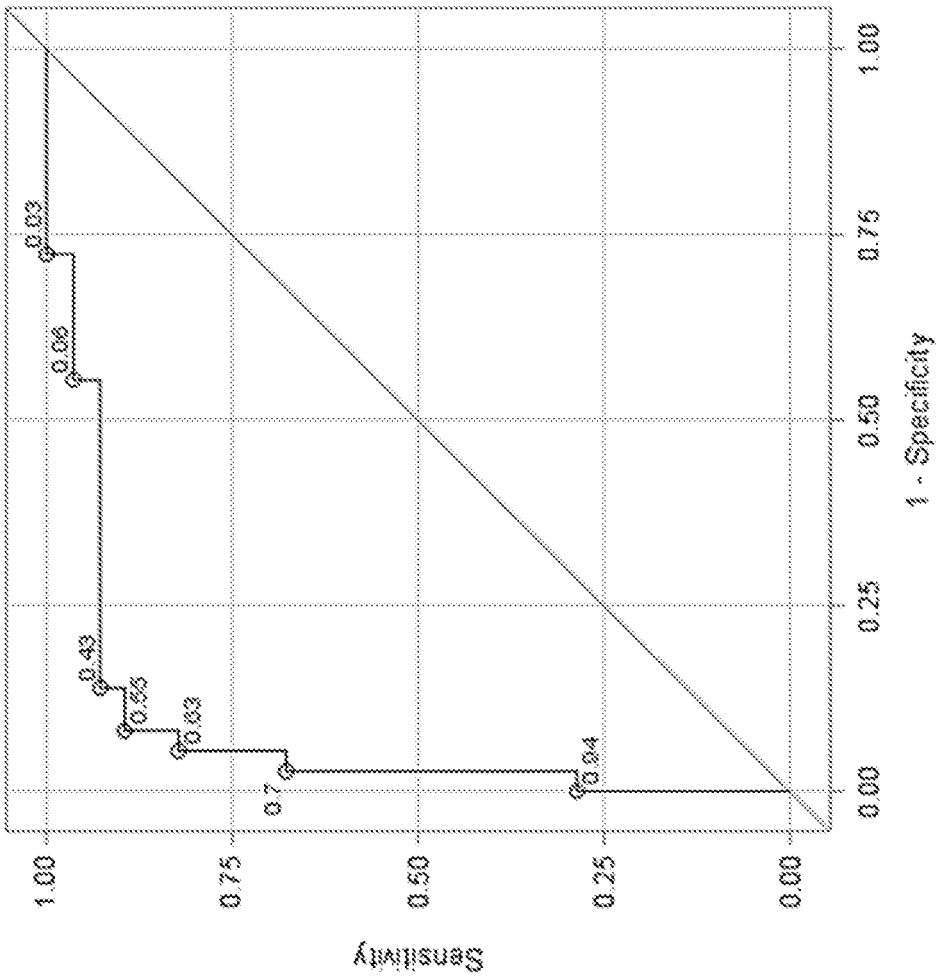


Fig.21

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = -8.9599 + 17.2942 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.6839 \times (hsa\text{-}miR\text{-}518b(Normal))$

$-13.8554 \times (hsa\text{-}miR\text{-}629(Tumor)) + 2.9395 \times (hsa\text{-}miR\text{-}629(Normal)) - 1.8605 \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal))$

$-0.4172 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor)) - 0.0740 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Normal))$

$-1.7502 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}629(Normal)))\}$

$+ 1.3733 \times \{(hsa\text{-}miR\text{-}629(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$ .....[formula19]

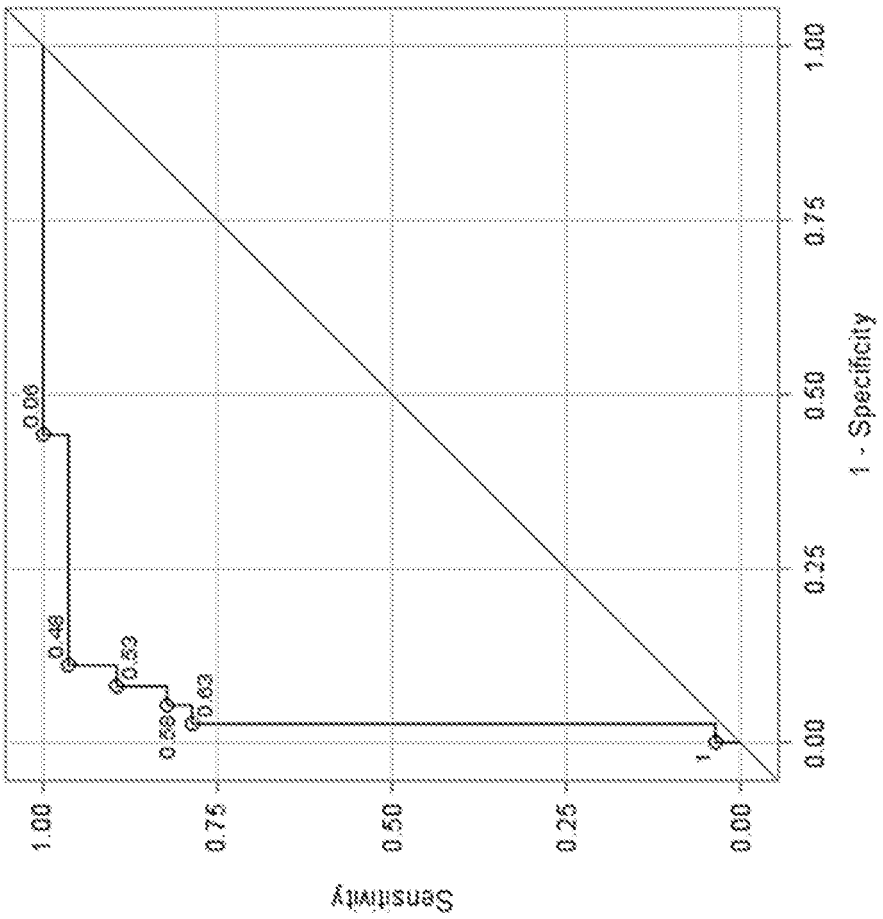


Fig.22

Recurrence score = exp(y)/(1 + exp(y)); in which y

$$y = 31.7485 + 15.9189 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.9124 \times (hsa\text{-}miR\text{-}518b(Normal)) -15.8373 \times (hsa\text{-}miR\text{-}629(Tumor)) + 5.9588 \times (hsa\text{-}miR\text{-}629(Normal)) - 9.6770 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) -0.4717 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor)) - 0.0887 \times (hsa\text{-}mir\text{-}139\text{-}3p(Normal)) -2.2334 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}629(Normal))\} +1.5743 \times \{(hsa\text{-}miR\text{-}629(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\} +0.6653 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal))\} \quad \text{.....[formula20]}$$

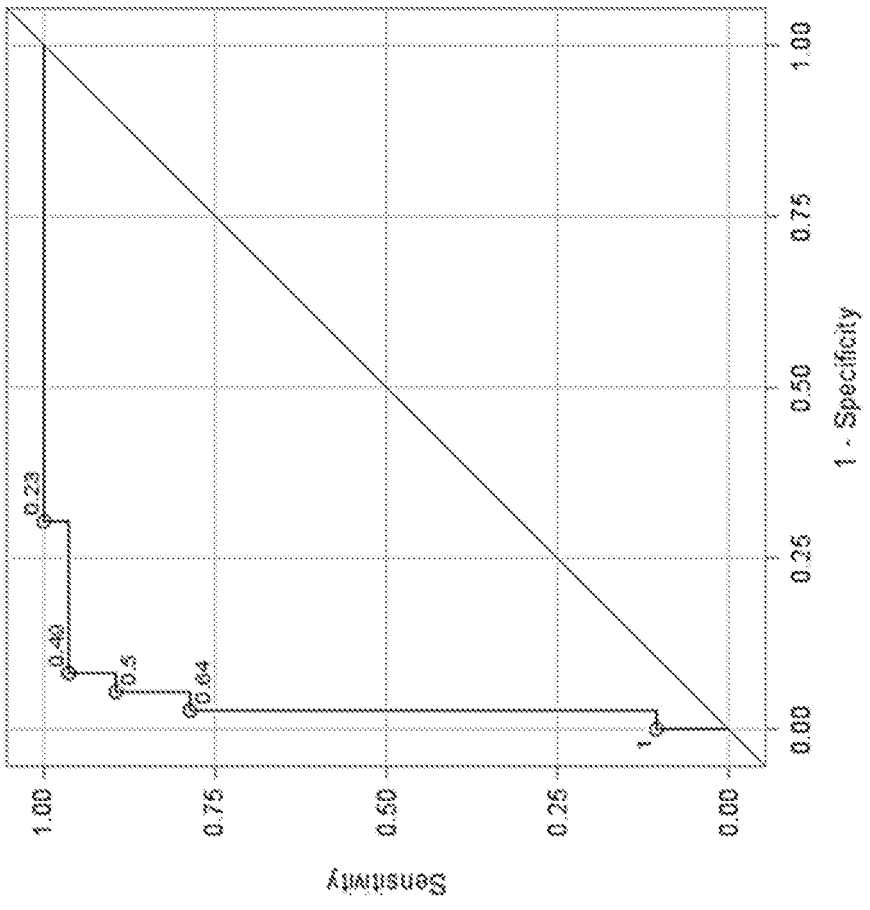


Fig.23

Recurrence score = exp(y)/(1 + exp(y)); in which y

$$y = 128.6 + 21.7977 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 1.4314 \times (hsa\text{-}miR\text{-}518b(Normal)) -23.0029 \times (hsa\text{-}miR\text{-}629(Tumor)) + 7.1152 \times (hsa\text{-}miR\text{-}629(Normal)) -20.8193 \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal)) -0.5185 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor)) -7.2706 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Normal)) -3.0939 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}629(Normal)))\} + 2.2659 \times \{(hsa\text{-}miR\text{-}629(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\} + 0.9353 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal))\} + 0.7224 \times \{(hsa\text{-}miR\text{-}885\text{-}5\,p(Normal)) \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Normal))\} \quad \text{.....[formula21]}$$

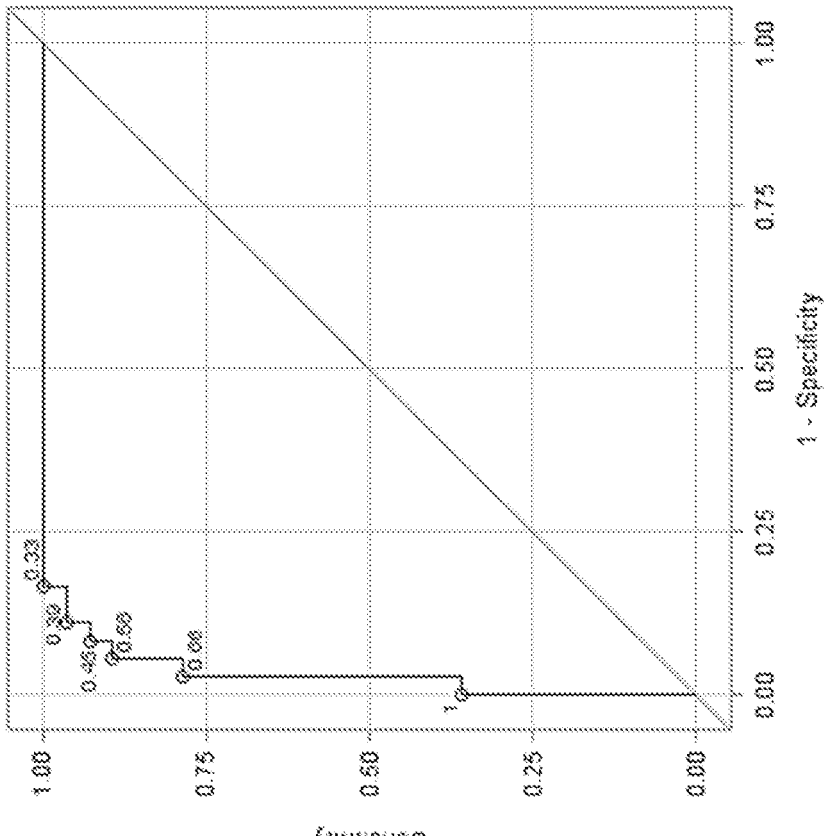


Fig.24

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 26.2637 - 0.7199 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.6026 \times (hsa\text{-}miR\text{-}518b(Normal))$

$+ 0.3850 \times (hsa\text{-}miR\text{-}629(Tumor))$

$-1.2722 \times (hsa\text{-}miR\text{-}629(Normal)) - 0.9709 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 0.2920 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))$

$-0.1035 \times (hsa\text{-}mir\text{-}139\text{-}3p(Normal)) - 0.1892 \times (hsa\text{-}miR\text{-}223*(Tumor)) \ldots\ldots [formula22]$

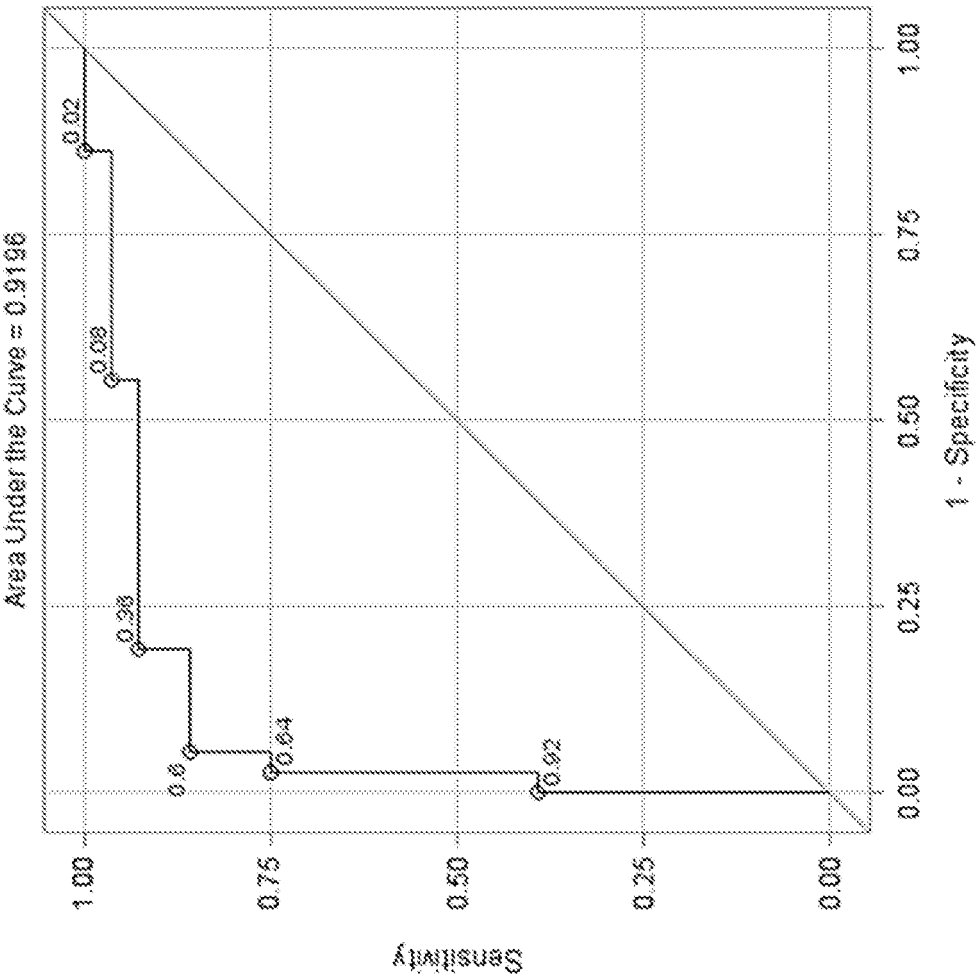


Fig.25

Recurrence score = exp(y)/(1 + exp(y)); in which y

$$y = -68.7954 + 7.6940 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.6949 \times (hsa\text{-}miR\text{-}518b(Normal))$$
$$+ 0.3207 \times (hsa\text{-}miR\text{-}629(Tumor)) + 7.9639 \times (hsa\text{-}miR\text{-}629(Normal))$$
$$-0.9677 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 0.2519 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))$$
$$-0.1122 \times (hsa\text{-}mir\text{-}139\text{-}3p(Normal)) - 0.2193 \times (hsa\text{-}miR\text{-}223*(Tumor))$$
$$-0.8210 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}629(Normal))\} \quad \text{.....[formula23]}$$

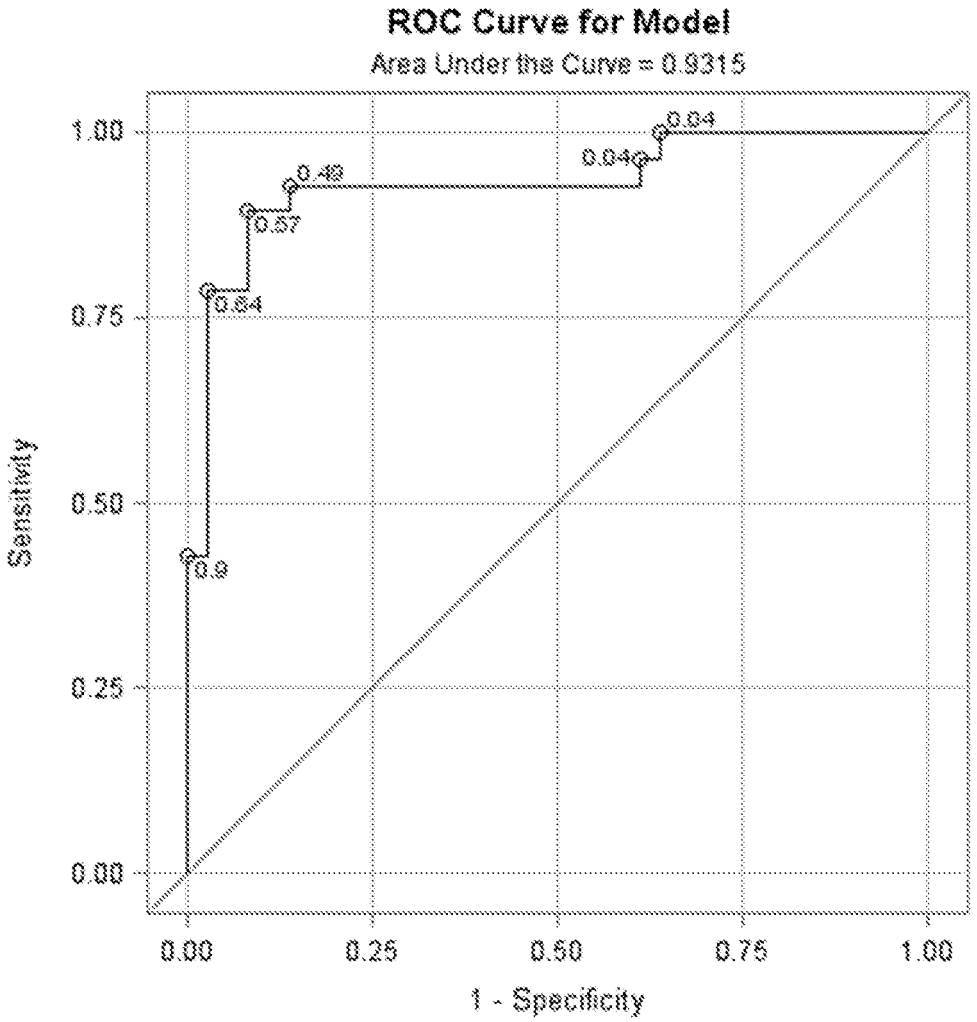


Fig.26

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = -17.0971 + 17.3647 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.7216 \times (hsa\text{-}miR\text{-}518b(Normal))$
$-13.2005 \times (hsa\text{-}miR\text{-}629(Tumor)) + 3.6886 \times (hsa\text{-}miR\text{-}629(Normal))$
$-1.7075 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 0.3346 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))$
$-0.1380 \times (hsa\text{-}mir\text{-}139\text{-}3p(Normal)) - 0.1915 \times (hsa\text{-}miR\text{-}223*(Tumor))$
$-1.7493 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}629(Normal))\}$
$+1.3013 \times \{(hsa\text{-}miR\text{-}629(Tumor) \times (hsa\text{-}miR\text{-}629(Normal))\}$.....[formula24]

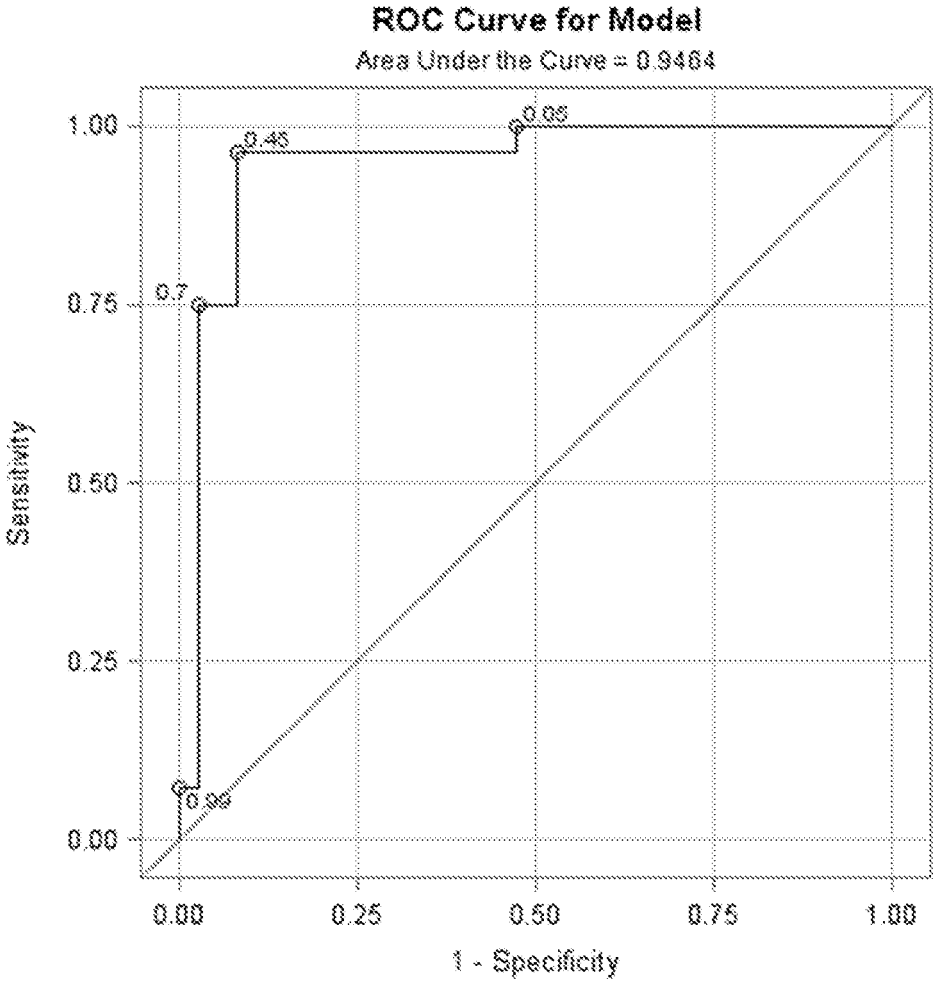


Fig.27

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 55.5037 + 16.5018 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 1.5212 \times (hsa\text{-}miR\text{-}518b(Normal))$
$-18.5036 \times (hsa\text{-}miR\text{-}629(Tumor)) + 4.2862 \times (hsa\text{-}miR\text{-}629(Normal))$
$-2.4828 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 0.3196 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))$
$-0.4981 \times (hsa\text{-}mir\text{-}139\text{-}3p(Normal)) - 7.0990 \times (hsa\text{-}miR\text{-}223*(Tumor))$
$-2.3513 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}629(Normal))\}$
$+ 1.8452 \times \{(hsa\text{-}miR\text{-}629(Tumor) \times (hsa\text{-}miR\text{-}629(Normal))\}$
$+ 0.5877 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}223*(Tumor))\}$.....[formula25]

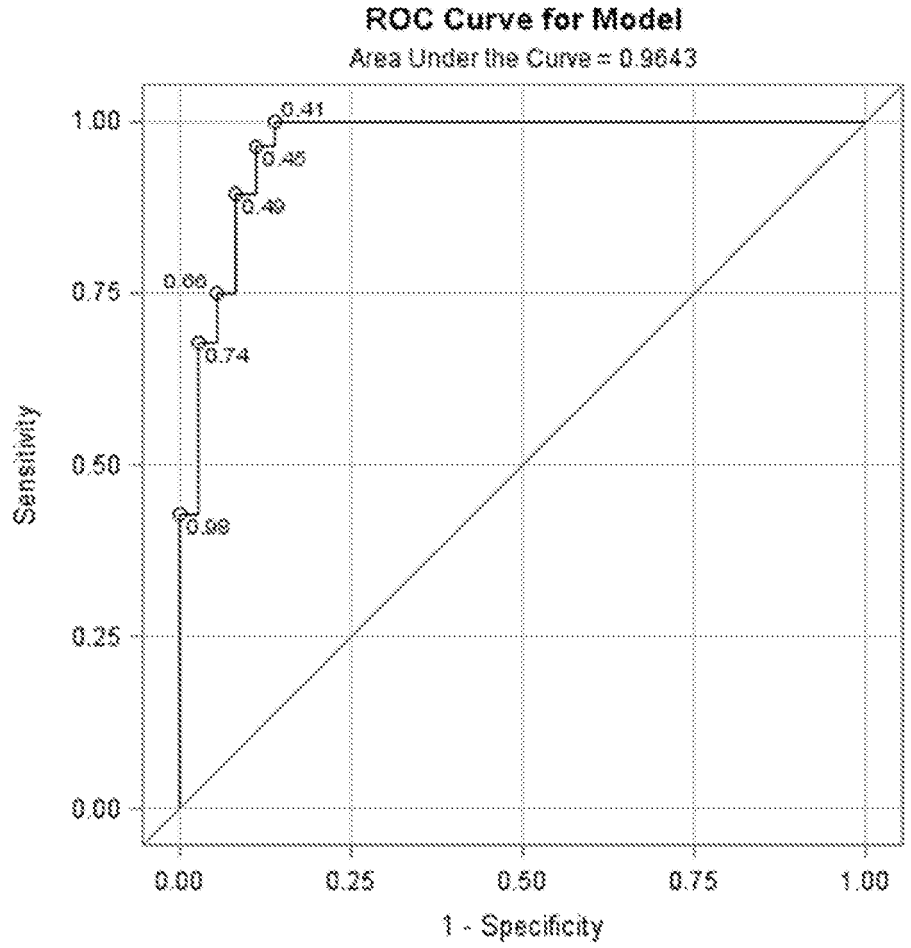


Fig.28

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 294.8-18.4197 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 40.6962 \times (hsa\text{-}miR\text{-}518b(Normal))$
$-16.0046 \times (hsa\text{-}miR\text{-}629(Tumor))-33.3077 \times (hsa\text{-}miR\text{-}629(Normal))-3.4433 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal))$
$-0.5615 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))-1.8451 \times (hsa\text{-}mir\text{-}139\text{-}3p(Normal))-18.4236 \times (hsa\text{-}miR\text{-}223 * (Tumor))$
$-1.3689 \times \{(hsa\text{-}miR\text{-}518b(Tumor) \times (hsa\text{-}miR\text{-}629(Normal))\}$
$+ 3.8986 \times \{(hsa\text{-}miR\text{-}629(Tumor) \times (hsa\text{-}miR\text{-}629(Normal))\}$
$+ 1.4698 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}223 * (Tumor))\}$
$-1.9122 \times \{(hsa\text{-}miR\text{-}518b(Normal)) \times (hsa\text{-}miR\text{-}629(Tumor))\}$.....{formula26}

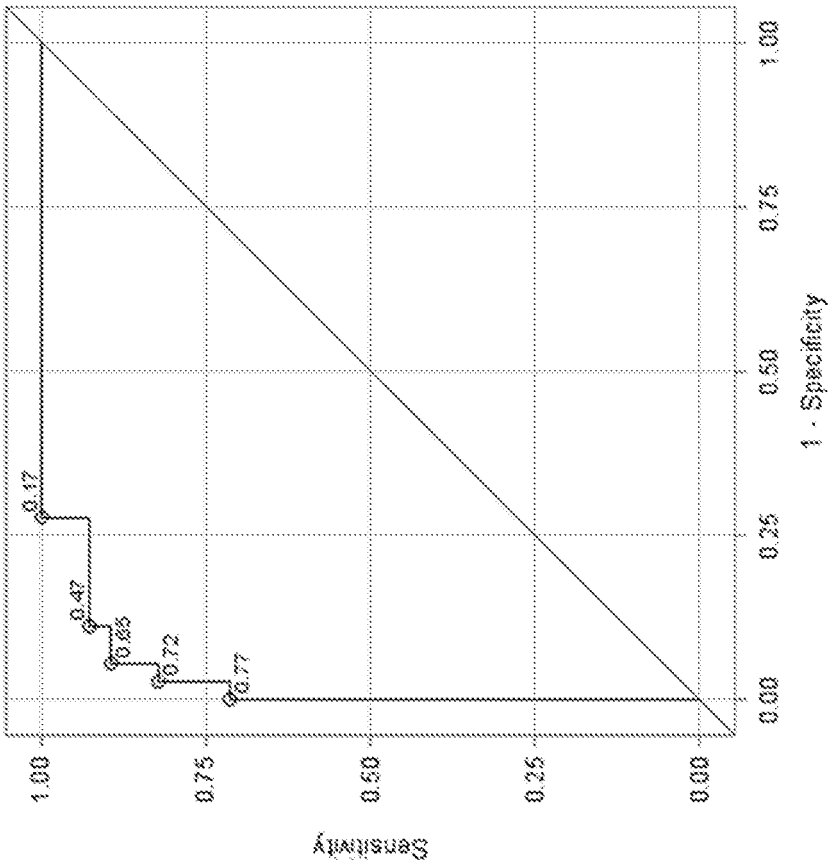


Fig.29

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 25.9125 - 0.6740 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.5092 \times (hsa\text{-}miR\text{-}518b(Normal))$
$+ 0.3870 \times (hsa\text{-}miR\text{-}629(Tumor)) - 1.2266 \times (hsa\text{-}miR\text{-}629(Normal)) - 0.9633 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal))$
$-0.2863 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor)) - 0.1075 \times (hsa\text{-}mir\text{-}139\text{-}3p(Normal))$
$-0.2587 \times (hsa\text{-}miR\text{-}223 * (Tumor)) + 0.0972 \times (hsa\text{-}miR\text{-}223 * (Normal))$.....[formula27]

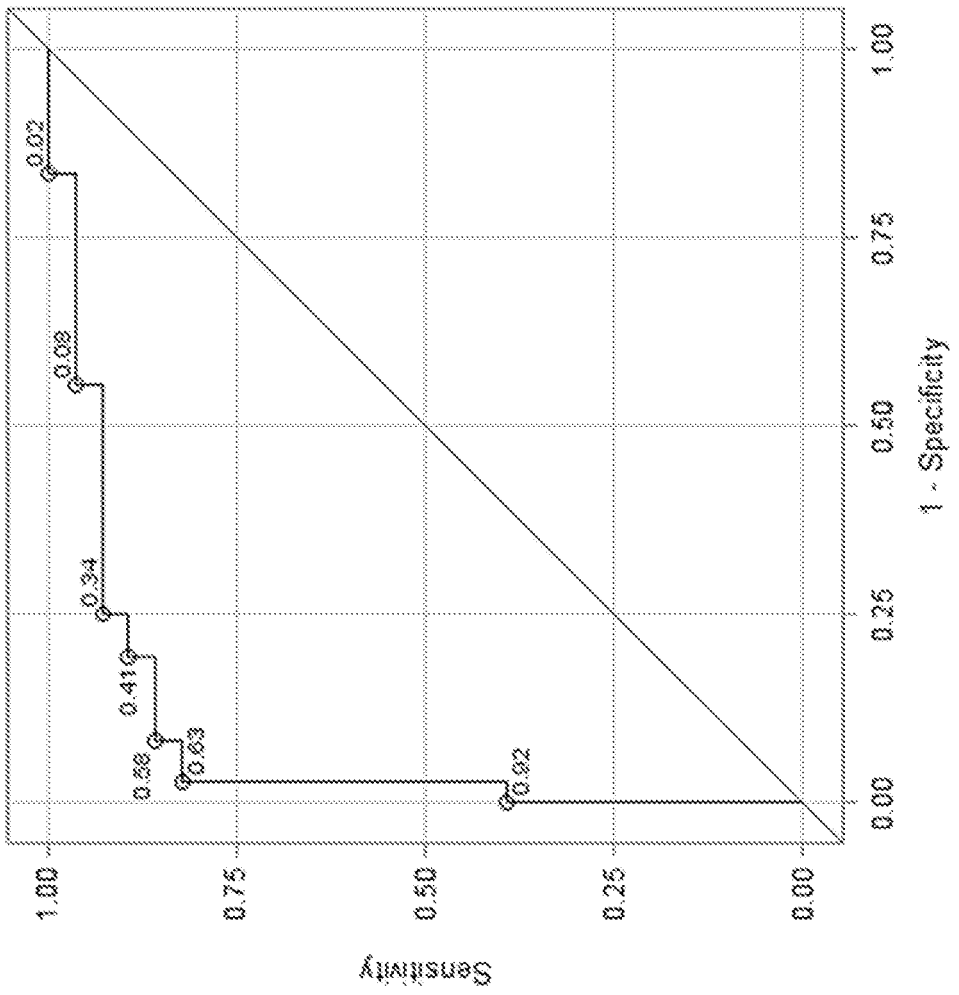


Fig.30

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = -6.91934 + 7.7258 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.7075 \times (hsa\text{-}miR\text{-}518b(Normal))$
$+ 0.3196 \times (hsa\text{-}miR\text{-}629(Tumor)) + 8.0023 \times (hsa\text{-}miR\text{-}629(Normal)) - 0.9692 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal))$
$-0.2522 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor)) - 0.1119 \times (hsa\text{-}mir\text{-}139\text{-}3p(Normal)) - 0.2103 \times (hsa\text{-}miR\text{-}223 * (Tumor))$
$-0.0126 \times (hsa\text{-}miR\text{-}223 * (Normal)) - 0.8247 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$,.....[formula28]

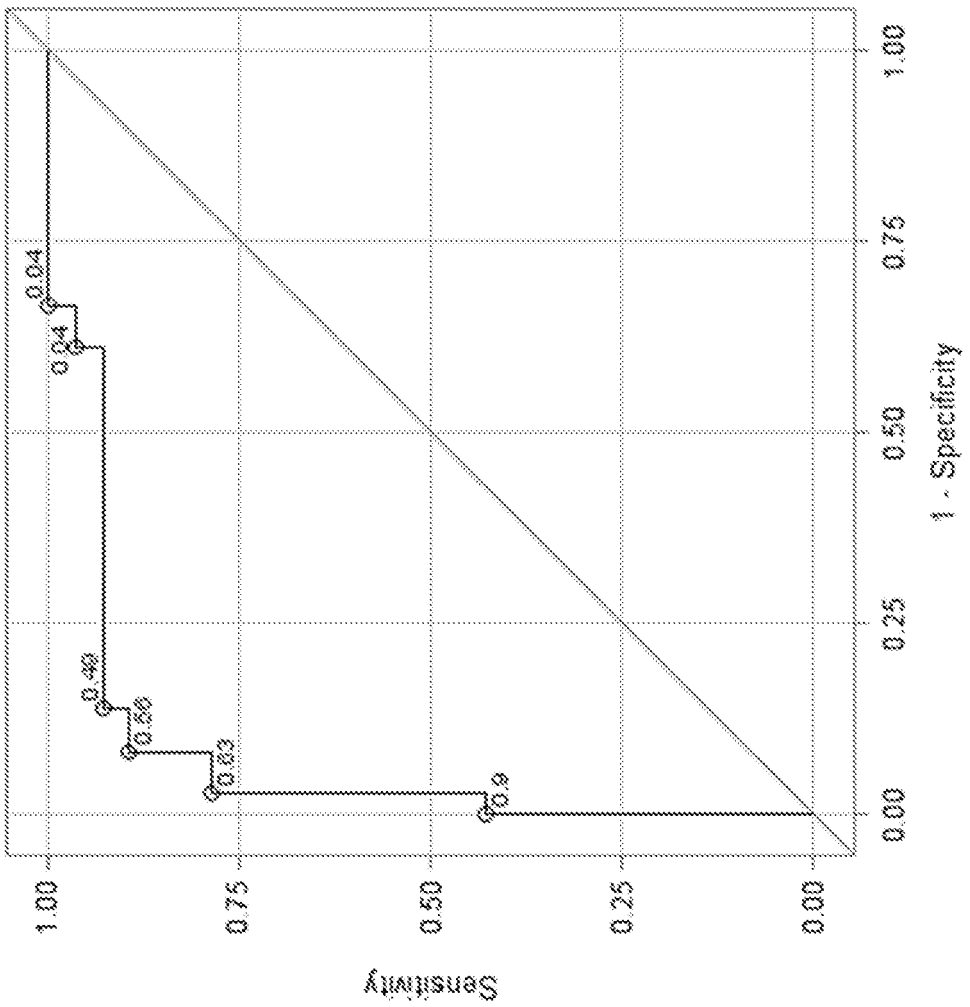


Fig.31

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = -13.9497 + 17.4002 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.6279 \times (hsa\text{-}miR\text{-}518b(Normal))$
$-13.4433 \times (hsa\text{-}miR\text{-}629(Tumor)) + 3.4325 \times (hsa\text{-}miR\text{-}629(Normal)) - 1.7349 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal))$
$-0.3360 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor)) - 0.1433 \times (hsa\text{-}mir\text{-}139\text{-}3p(Normal))$
$-0.2594 \times (hsa\text{-}miR\text{-}223 * (Tumor)) + 0.0966 \times (hsa\text{-}miR\text{-}223 * (Normal))$
$-1.7485 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$
$+1.3255 \times \{(hsa\text{-}miR\text{-}629(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$ .....[formula29]

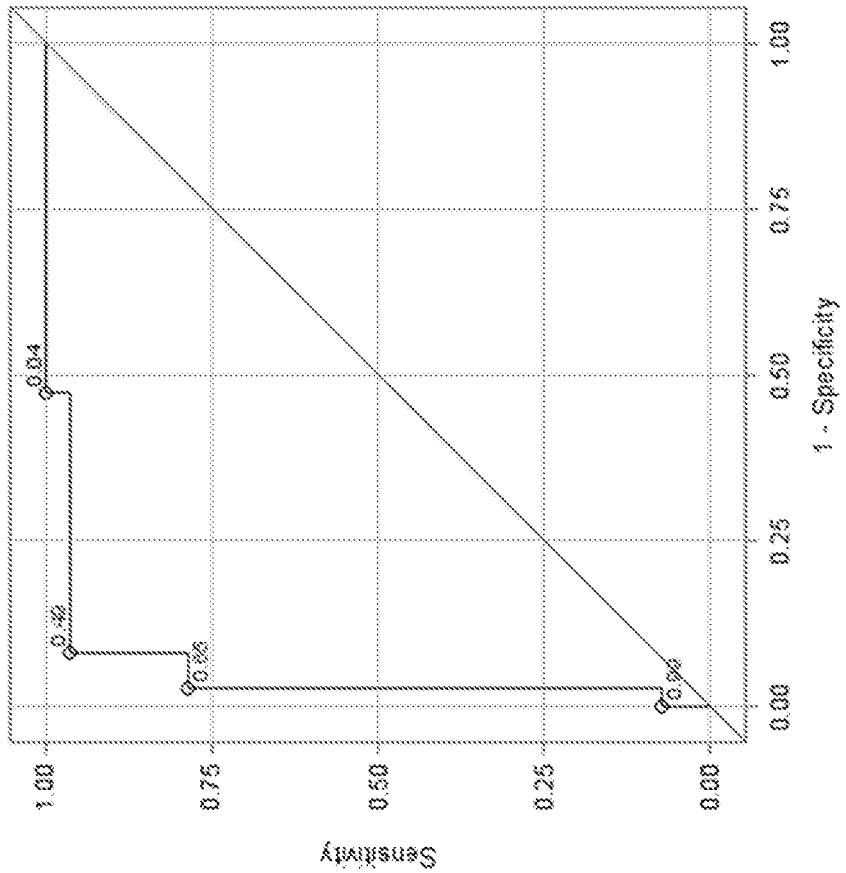


Fig.32

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 162.1\text{-}0.7534 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 28.6992 \times (hsa\text{-}miR\text{-}518b(Normal))$
$\text{-}24.7347 \times (hsa\text{-}miR\text{-}629(Tumor)) + 2.4418 \times (hsa\text{-}miR\text{-}629(Normal))\text{-}19.8193 \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal))$
$\text{-}0.4848 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor))\text{-}0.3705 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Normal))\text{-}0.7596 \times (hsa\text{-}miR\text{-}223\ *\ (Tumor))$
$\text{-}14.3213 \times (hsa\text{-}miR\text{-}223\ *\ (Normal))\text{-}2.6334 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$
$+ 2.4241 \times \{(hsa\text{-}miR\text{-}629(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$
$+ 1.5678 \times \{(hsa\text{-}miR\text{-}885\text{-}5\,p(Normal)) \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Normal))\}$ .....[formula30]

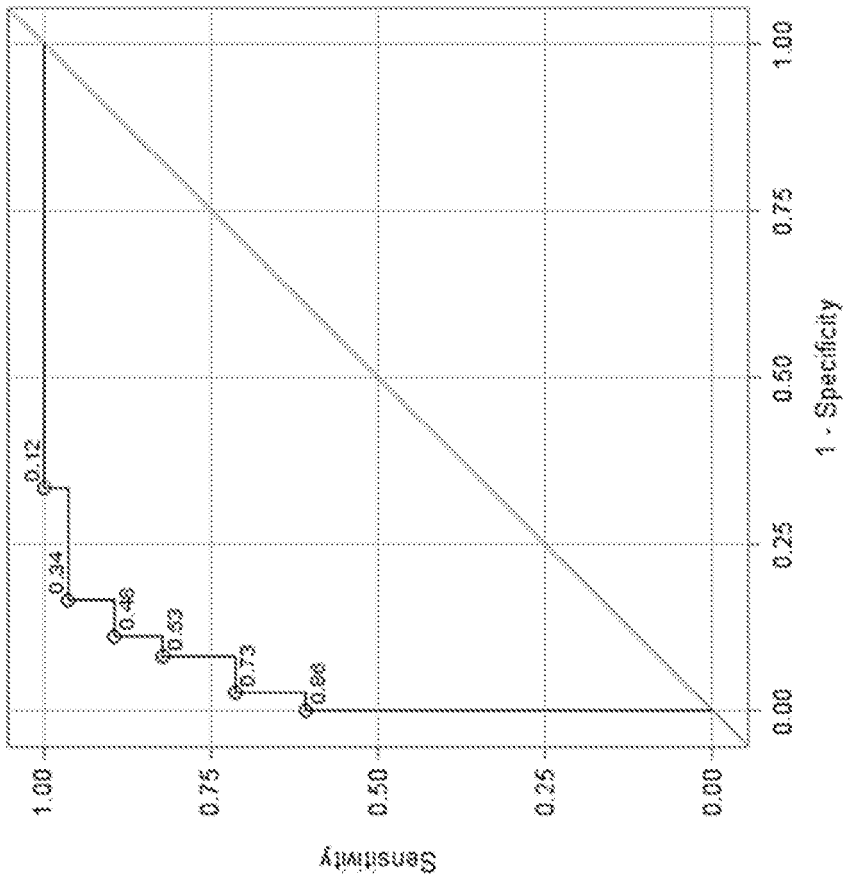


Fig.33

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 298.5 - 0.7477 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 23.3527 \times (hsa\text{-}miR\text{-}518b(Normal))$
$-30.3301 \times (hsa\text{-}miR\text{-}629(Tumor)) + 0.3090 \times (hsa\text{-}miR\text{-}629(Normal)) - 19.6142 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal))$
$-0.4214 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor)) - 0.8382 \times (hsa\text{-}mir\text{-}139\text{-}3p(Normal)) + 12.1727 \times (hsa\text{-}miR\text{-}223 * (Tumor))$
$-14.0675 \times (hsa\text{-}miR\text{-}223 * (Normal)) - 2.9762 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$
$+ 2.9549 \times \{(hsa\text{-}miR\text{-}629(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$
$+ 1.5434 \times \{(hsa\text{-}miR\text{-}885\text{-}5p(Normal)) \times (hsa\text{-}mir\text{-}139\text{-}3p(Normal))\}$
$+ 0.9074 \times \{(hsa\text{-}miR\text{-}518b(Normal) \times (hsa\text{-}miR\text{-}223 * (Tumor))\}$.....[formula31]

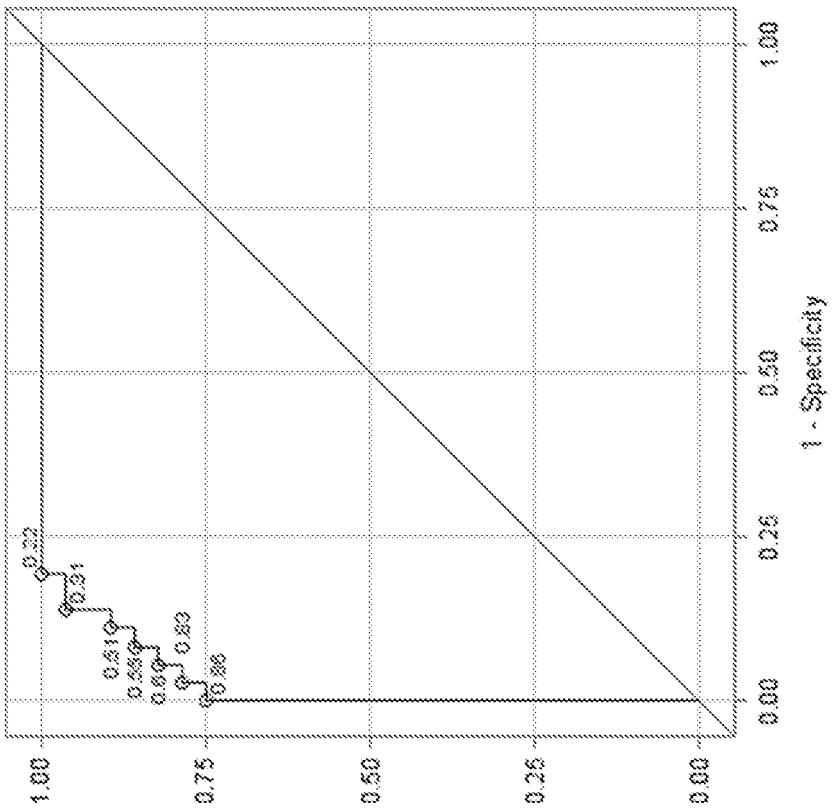


Fig.34

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 24.3035 + 0.5340 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Tumor)) - 0.1910 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Normal))$
$-0.7638 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.4479 \times (hsa\text{-}miR\text{-}629(Tumor)) - 0.9289 \times (hsa\text{-}miR\text{-}629(Normal))$
$-0.6998 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal)) - 0.3048 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Tumor))$
$-0.1598 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Normal)) - 0.6600 \times (hsa\text{-}miR\text{-}223 * (Tumor))$
$+ 0.4940 \times (hsa\text{-}miR\text{-}223 * (Normal))$.....[formula32]

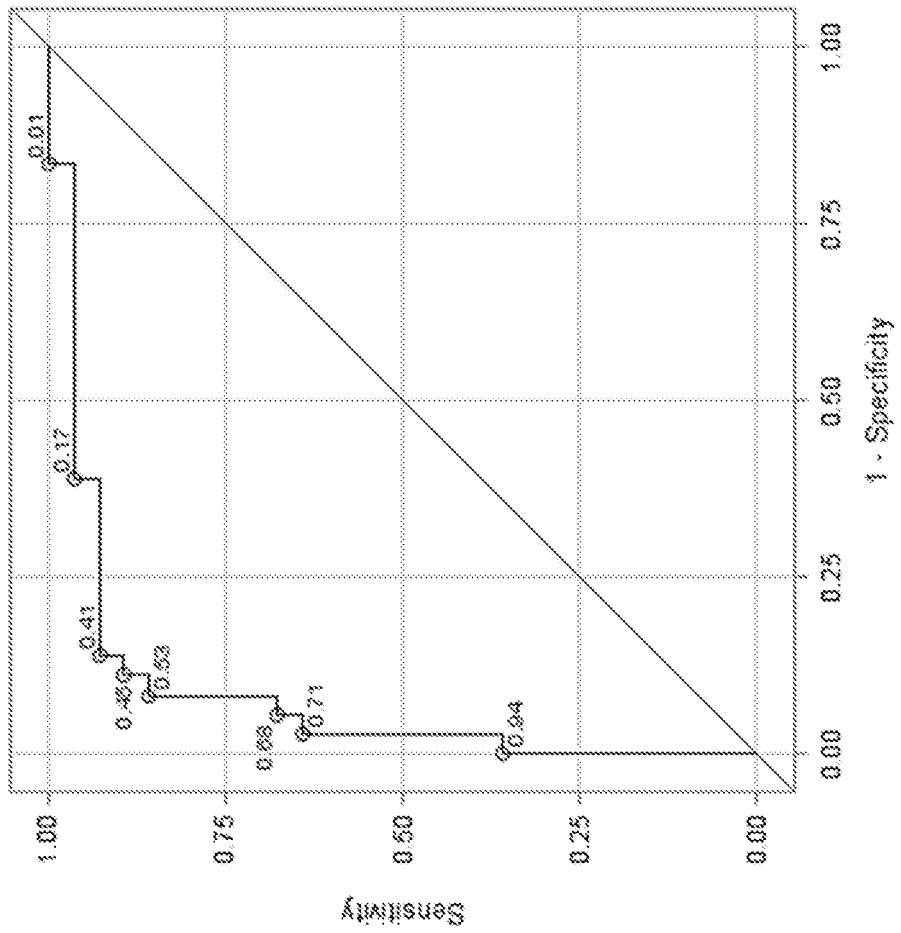


Fig.35

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 167.7 - 13.2279 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Tumor)) - 1.1091 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Normal))$

$-1.4007 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 1.1036 \times (hsa\text{-}miR\text{-}629(Tumor)) - 1.1119 \times (hsa\text{-}miR\text{-}629(Normal))$

$-15.0002 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal)) - 0.6073 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Tumor))$

$-0.6369 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Normal)) - 1.3449 \times (hsa\text{-}miR\text{-}223 * (Tumor)) + 1.2204 \times (hsa\text{-}miR\text{-}223 * (Normal))$

$+ 1.5767 \times \{(hsa\text{-}mir\text{-}1224\text{-}5\ p(Tumor)) \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal))\}$ .....[formula33]

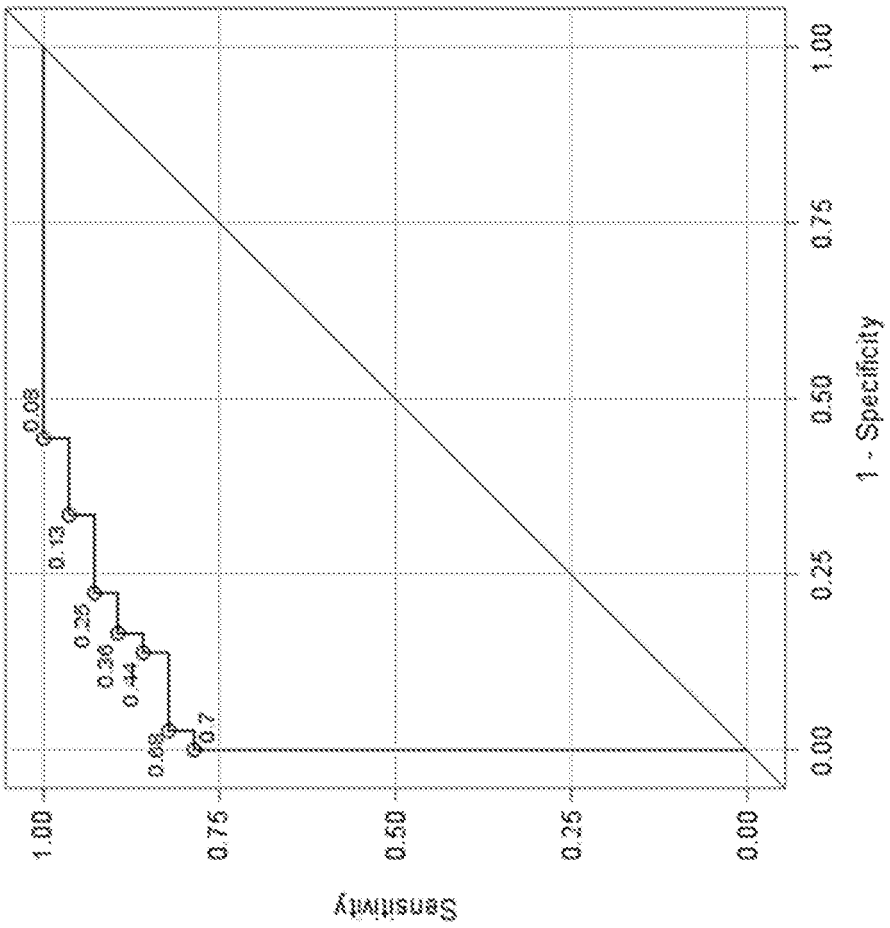


Fig.36

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 359.0\text{-}20.5097 \times (hsa\text{-}mir\text{-}1224\text{-}5\,p(Tumor)) \text{-} 2.1028 \times (hsa\text{-}mir\text{-}1224\text{-}5\,p(Normal))$

$\text{-}3.0483 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 2.5706 \times (hsa\text{-}miR\text{-}629(Tumor)) \text{-} 2.4592 \times (hsa\text{-}miR\text{-}629(Normal))$

$\text{-}23.3841 \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal)) \text{-} 6.4496 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor))$

$\text{-}1.5971 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Normal)) \text{-} 11.6562 \times (hsa\text{-}miR\text{-}223\text{*}(Tumor)) + 2.4651 \times (hsa\text{-}miR\text{-}223\text{*}(Normal))$

$+ 2.5240 \times \{(hsa\text{-}mir\text{-}1224\text{-}5\,p(Tumor)) \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal))\}$

$+ 0.5692 \times \{(hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor)) \times (hsa\text{-}miR\text{-}223\text{*}(Tumor))\}$ .....[formula34]

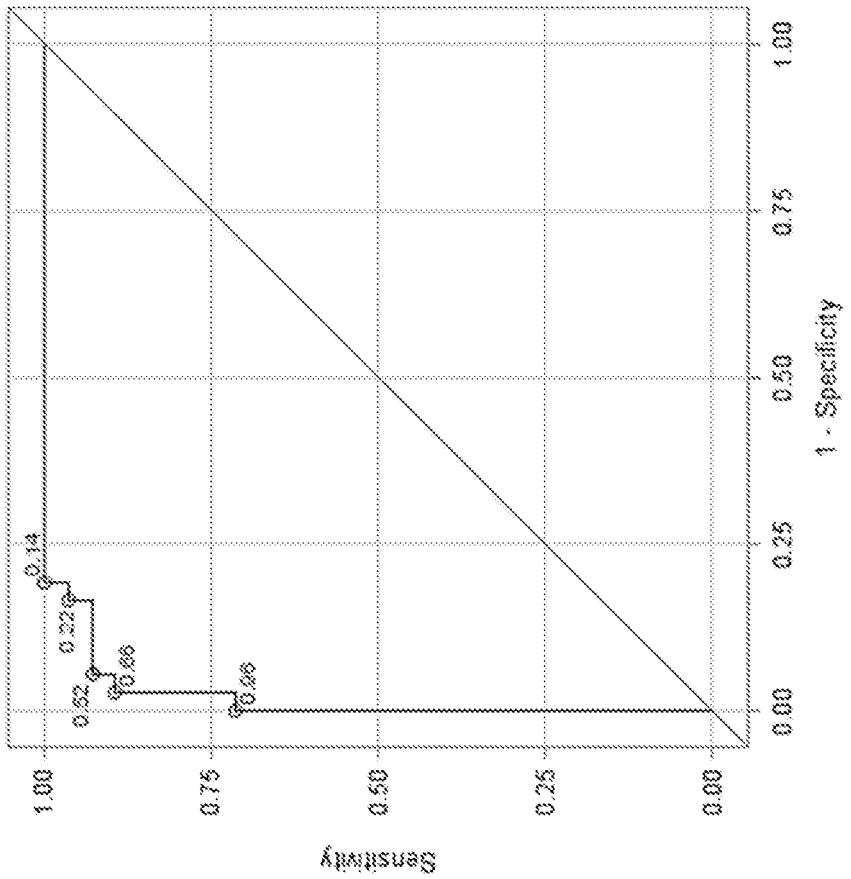


Fig.37

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 415.1\text{-}29.9501 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Tumor)) + 7.6962 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Normal))$
$-4.7711 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 3.3794 \times (hsa\text{-}miR\text{-}629(Tumor))\text{-}2.3400 \times (hsa\text{-}miR\text{-}629(Normal))$
$-33.1847 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal))\text{-}8.9096 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Tumor))$
$-1.6504 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Normal))\text{-}6.1349 \times (hsa\text{-}miR\text{-}223 * (Tumor)) + 1.8411 \times (hsa\text{-}miR\text{-}223 * (Normal))$
$+ 3.5456 \times \{(hsa\text{-}mir\text{-}1224\text{-}5\ p(Tumor)) \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal))\}$
$+ 0.7616 \times \{(hsa\text{-}mir\text{-}139\text{-}3\ p(Tumor)) \times (hsa\text{-}miR\text{-}223 * (Tumor))\}$
$-0.9109 \times \{(hsa\text{-}mir\text{-}1224\text{-}5\ p(Normal) \times (hsa\text{-}miR\text{-}223 * (Tumor))\}$ .....[formula35]

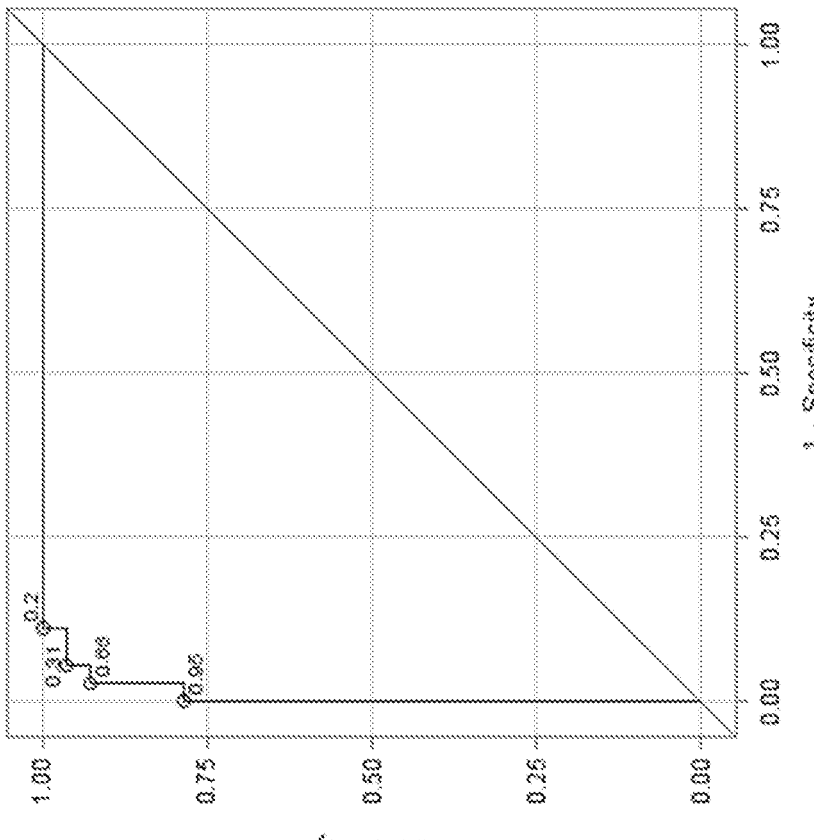


Fig.38

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 843.7\text{-}32.7889 \times (hsa\text{-}mir\text{-}1224\text{-}5\,p(Tumor))\text{-}4.2230 \times (hsa\text{-}mir\text{-}1224\text{-}5\,p(Normal))$
$\text{-}4.2232 \times (hsa\text{-}miR\text{-}518b(Tumor))\text{-}20.6187 \times (hsa\text{-}miR\text{-}629(Tumor))\text{-}30.0652 \times (hsa\text{-}miR\text{-}629(Normal))$
$\text{-}38.5813 \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal))\text{-}8.9655 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor))\text{-}2.8265 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Normal))$
$\text{-}16.9922 \times (hsa\text{-}miR\text{-}223 * (Tumor)) + 3.7414 \times (hsa\text{-}miR\text{-}223 * (Normal))$
$+ 4.0480 \times \{(hsa\text{-}mir\text{-}1224\text{-}5\,p(Tumor)) \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal))\}$
$+ 0.8328 \times \{(hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor)) \times (hsa\text{-}miR\text{-}223 * (Tumor))\}$
$+ 2.2931 \times \{(hsa\text{-}miR\text{-}629(Tumor)) \times (hsa\text{-}miR\text{-}629(Normal))\}$.....[formula36]

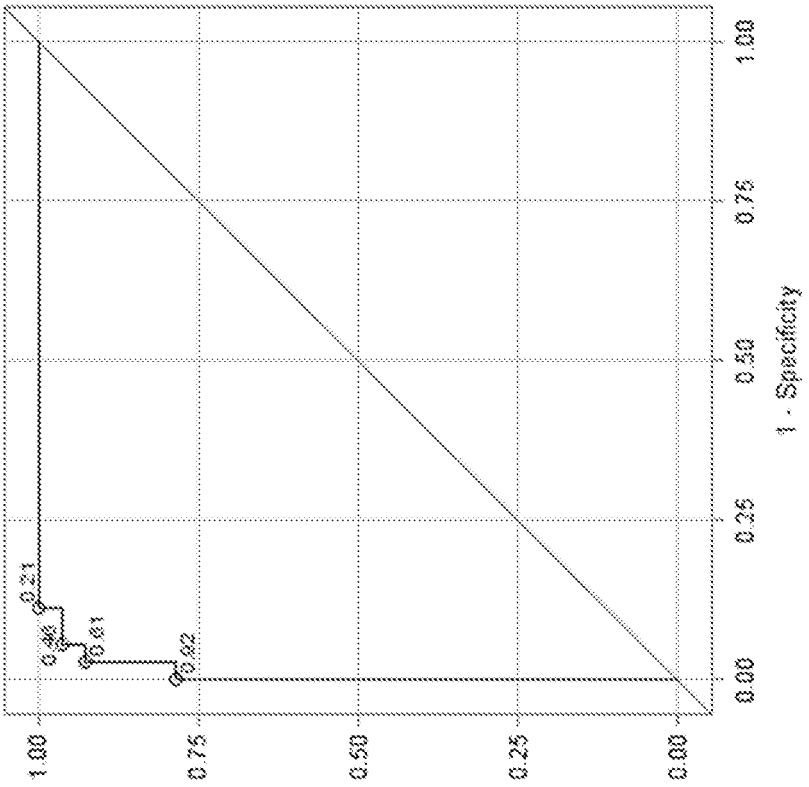


Fig.39

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 315.8-26.3641 \times (hsa\text{-}mir\text{-}1224\text{-}5\,p(Tumor))\text{-}3.1687 \times (hsa\text{-}mir\text{-}1224\text{-}5\,p(Normal))$
$\text{-}3.8282 \times (hsa\text{-}miR\text{-}518h(Tumor)) + 2.9126 \times (hsa\text{-}miR\text{-}629(Tumor)) + 9.4863 \times (hsa\text{-}miR\text{-}629(Normal))$
$\text{-}30.1097 \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal))\text{-}6.9425 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor))\text{-}2.0399 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Normal))$
$+ 0.5164 \times (hsa\text{-}miR\text{-}223 * (Tumor)) + 3.1883 \times (hsa\text{-}miR\text{-}223 * (Normal))$
$+ 3.2598 \times \{(hsa\text{-}mir\text{-}1224\text{-}5\,p(Tumor)) \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal))\}$
$+ 0.6281 \times \{(hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor)) \times (hsa\text{-}miR\text{-}223 * (Tumor))\}$
$\text{-}3.3465 \times \{(hsa\text{-}miR\text{-}629(Normal)) \times (hsa\text{-}miR\text{-}223 * (Tumor))\}$ .....[formula37]

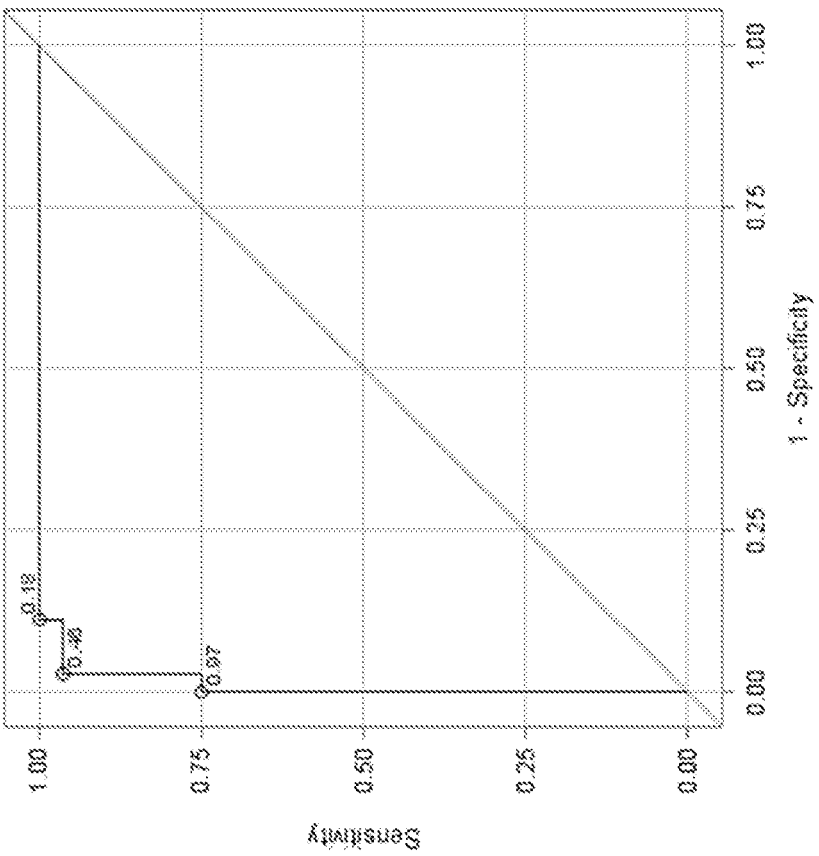


Fig.40

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 24.4235 + 0.4852 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Tumor)) - 0.1668 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Normal))$
$-0.7664 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.4521 \times (hsa\text{-}miR\text{-}629(Tumor)) - 0.9759 \times (hsa\text{-}miR\text{-}629(Normal))$
$+ 0.1329 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Tumor)) - 0.7464 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal))$
$-0.3416 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Tumor)) - 0.1460 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Normal)) - 0.6731 \times (hsa\text{-}miR\text{-}223 * (Tumor))$
$+ 0.4968 \times (hsa\text{-}miR\text{-}223 * (Normal))$.....[formula38]

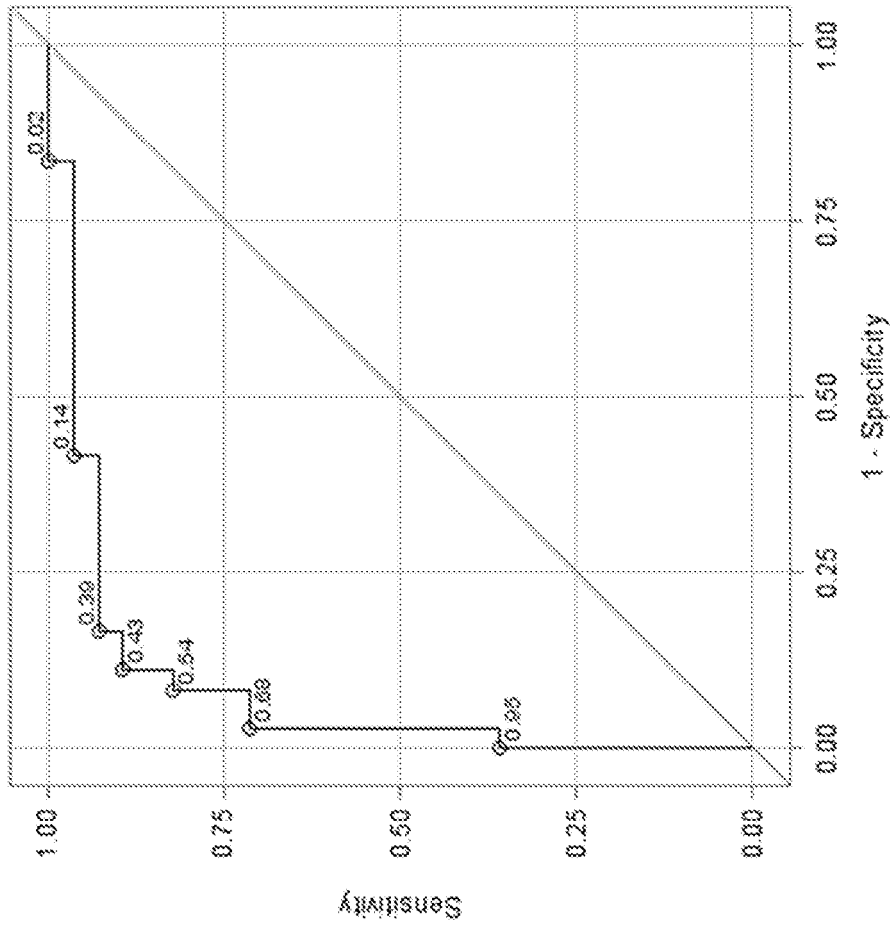


Fig.41

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 186.7 - 14.9237 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Tumor)) - 1.3152 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Normal))$
$- 1.4097 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 1.1823 \times (hsa\text{-}miR\text{-}629(Tumor))$
$- 1.0889 \times (hsa\text{-}miR\text{-}629(Normal)) - 0.4604 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Tumor))$
$- 16.6973 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal)) - 0.5608 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Tumor))$
$- 0.7088 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Normal)) - 1.3307 \times (hsa\text{-}miR\text{-}223\ *\ (Tumor)) + 1.2948 \times (hsa\text{-}miR\text{-}223\ *\ (Normal))$
$+ 1.7823 \times \{(hsa\text{-}mir\text{-}1224\text{-}5\ p(Tumor)) \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal))\}$ .....[formula39]

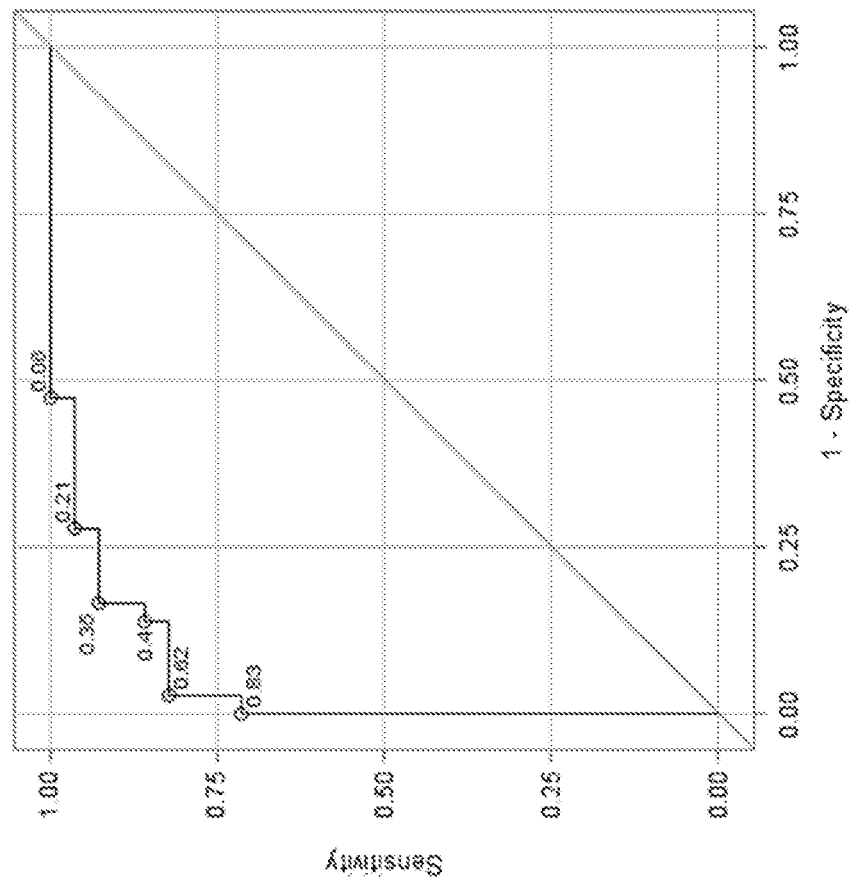


Fig.42

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 381.9 - 24.0811 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Tumor)) - 2.4194 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Normal))$
$-10.2279 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 2.4929 \times (hsa\text{-}miR\text{-}629(Tumor))$
$-0.5979 \times (hsa\text{-}miR\text{-}629(Normal)) - 0.9393 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Tumor)) - 27.9006 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal))$
$-0.7966 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Tumor)) - 1.5331 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Normal)) - 10.0833 \times (hsa\text{-}miR\text{-}223\ *\ (Tumor))$
$+ 2.4595 \times (hsa\text{-}miR\text{-}223\ *\ (Normal)) + 2.9437 \times \{(hsa\text{-}mir\text{-}1224\text{-}5\ p(Tumor)) \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal))\}$
$+ 0.6778 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Normal))\}$;.....[formula40]

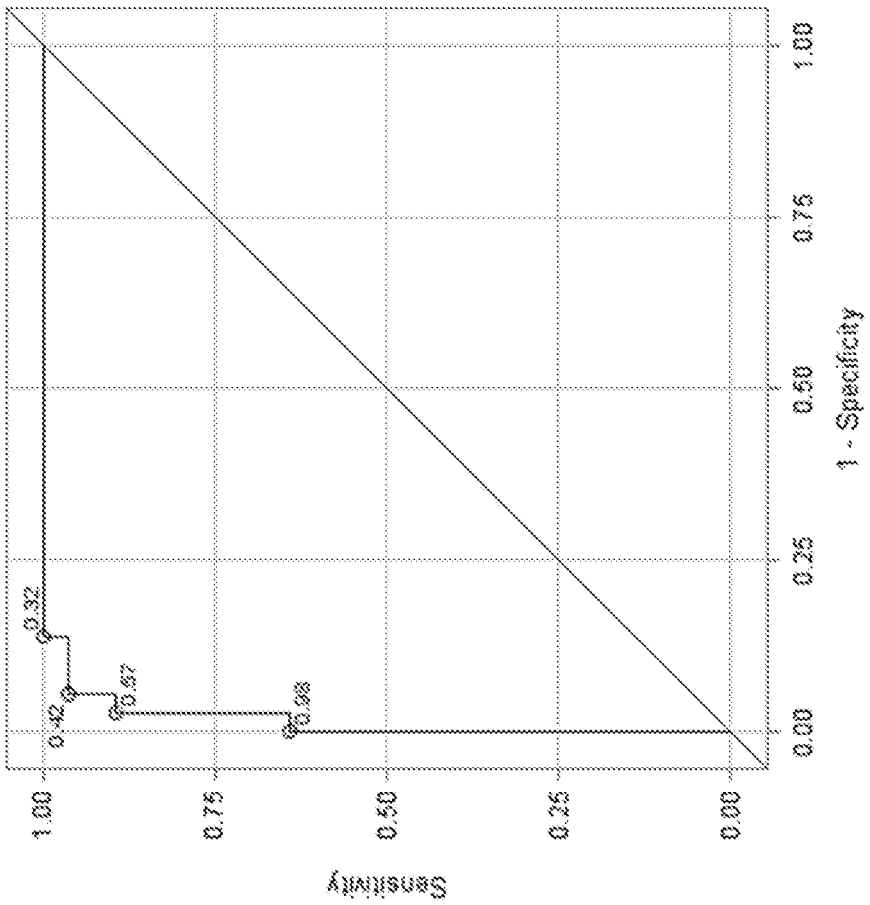


Fig.43

Recurrence score = exp(y)/(1 + exp(y)); in which y

$$y = 480.7 - 46.8405 \times (hsa\text{-}mir\text{-}1224\text{-}5\,p(Tumor)) - 2.1257 \times (hsa\text{-}mir\text{-}1224\text{-}5\,p(Normal))$$
$$-9.9400 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 2.5093 \times (hsa\text{-}miR\text{-}629(Tumor)) - 1.0316 \times (hsa\text{-}miR\text{-}629(Normal))$$
$$-2.1232 \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Tumor)) - 37.5329 \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal)) - 1.0791 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor))$$
$$+ 1.6236 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Normal)) - 1.7086 \times (hsa\text{-}miR\text{-}223\text{*}(Tumor)) + 2.2057 \times (hsa\text{-}miR\text{-}223\text{*}(Normal))$$
$$+ 4.0693 \times \{(hsa\text{-}mir\text{-}1224\text{-}5\,p(Tumor)) \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal))\}$$
$$-0.2442 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Normal))\}$$
$$+ 1.0647 \times \{(hsa\text{-}mir\text{-}1224\text{-}5\,p(Tumor)) \times (hsa\text{-}miR\text{-}518b(Tumor))\} \quad \text{.....[formula41]}$$

Fig.44

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 468.2-37.0352 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Tumor))\text{-}3.1280 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Normal))$
$\text{-}6.5985 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 2.4534 \times (hsa\text{-}miR\text{-}629(Tumor))\text{-}0.3473 \times (hsa\text{-}miR\text{-}629(Normal))$
$\text{-}1.6419 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Tumor))\text{-}40.7892 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal))\text{-}12.2513 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Tumor))$
$+10.7013 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Normal))\text{-}2.0281 \times (hsa\text{-}miR\text{-}223\ *(Tumor)) + 2.7296 \times (hsa\text{-}miR\text{-}223\ *(Normal))$
$+ 4.3313 \times \{(hsa\text{-}mir\text{-}1224\text{-}5\ p(Tumor)) \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal))\}$
$\text{-}1.0946 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Normal))\}$
$+1.0057 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Tumor))\}$ .....[formula42]

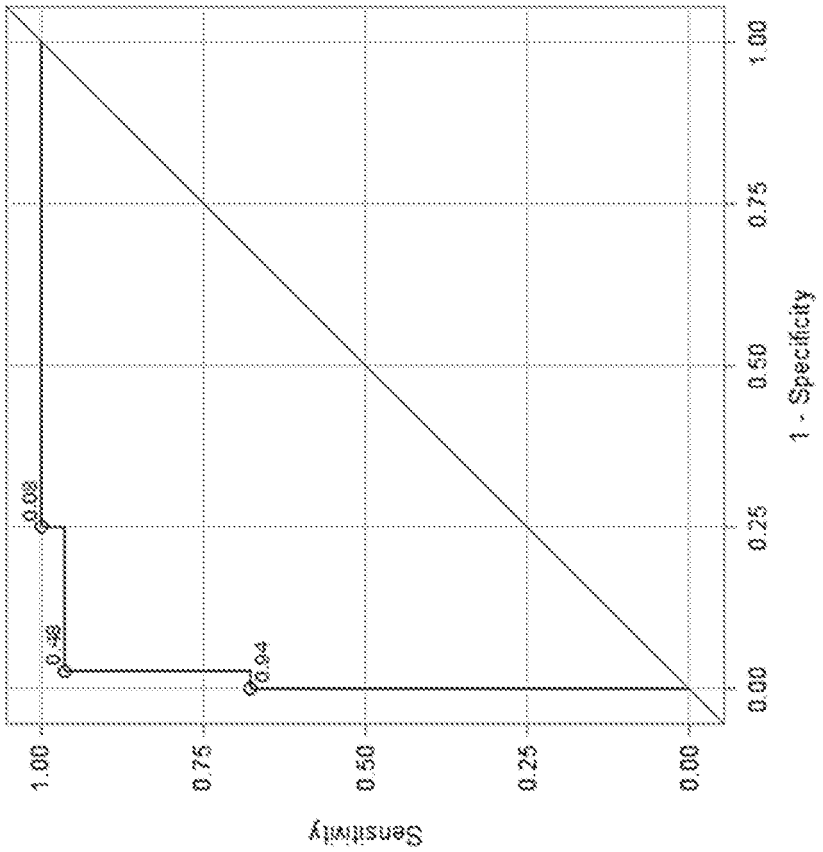


Fig.45

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 376.0\text{-}26.3925 \times (hsa\text{-}mir\text{-}1224\text{-}5\,p(Tumor)) \text{-} 2.7514 \times (hsa\text{-}mir\text{-}1224\text{-}5\,p(Normal))$

$\text{-}7.7972 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 2.5951 \times (hsa\text{-}miR\text{-}629(Tumor))$

$\text{-}0.3460 \times (hsa\text{-}miR\text{-}629(Normal)) \text{-} 1.0957 \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Tumor)) \text{-} 30.3785 \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal))$

$\text{-}0.8151 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor)) + 1.6837 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Normal)) \text{-} 10.3771 \times (hsa\text{-}miR\text{-}223\text{*}(Tumor))$

$+ 2.5761 \times (hsa\text{-}miR\text{-}223\text{*}(Normal)) + 3.2011 \times \{(hsa\text{-}mir\text{-}1224\text{-}5\,p(Tumor)) \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal))\}$

$\text{-}0.2899 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Normal))\}$

$+ 0.7126 \times \{(hsa\text{-}miR\text{-}518b(Tumor)) \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor))\}$.....[formula43]

Fig.46

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 24.8947 + 0.5365 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Tumor)) - 0.3340 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Normal))$
$-1.0240 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.5065 \times (hsa\text{-}miR\text{-}518b(Normal)) + 0.5491 \times (hsa\text{-}miR\text{-}629(Tumor))$
$-1.2018 \times (hsa\text{-}miR\text{-}629(Normal)) + 0.1196 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Tumor)) - 0.8256 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal))$
$-0.3039 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Tumor)) - 0.2134 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Normal))$
$-0.5905 \times (hsa\text{-}miR\text{-}223 * (Tumor)) + 0.3824 \times (hsa\text{-}miR\text{-}223 * (Normal))$ .....[formula44]

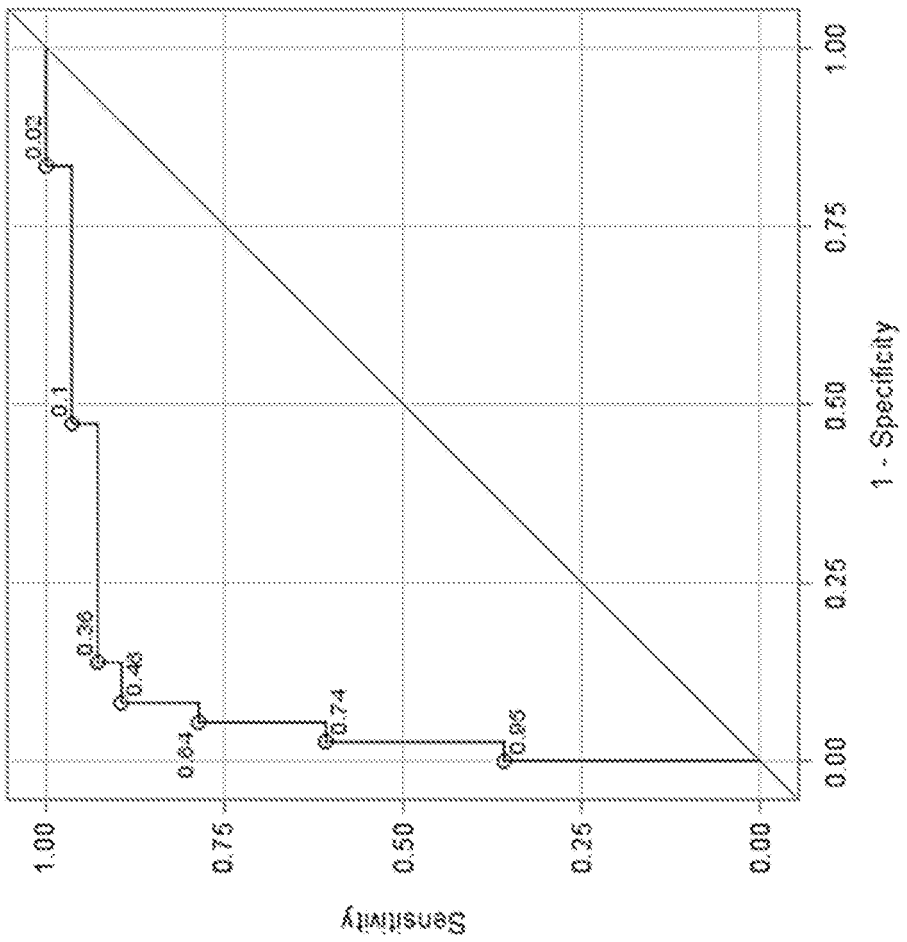


Fig.47

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 190.5\text{-}15.2253 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Tumor)) \text{-}1.6745 \times (hsa\text{-}mir\text{-}1224\text{-}5\ p(Normal))$
$\text{-}1.7881 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 0.7531 \times (hsa\text{-}miR\text{-}518b(Normal))$
$+ 1.3768 \times (hsa\text{-}miR\text{-}629(Tumor)) \text{-}1.5803 \times (hsa\text{-}miR\text{-}629(Normal)) \text{-}0.5721 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Tumor))$
$\text{-}16.9701 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal)) \text{-}0.4978 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Tumor)) \text{-}0.7833 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Normal))$
$\text{-}1.2109 \times (hsa\text{-}miR\text{-}223 * (Tumor)) + 1.1800 \times (hsa\text{-}miR\text{-}223 * (Normal))$
$+ 1.8281 \times \{(hsa\text{-}mir\text{-}1224\text{-}5\ p(Tumor)) \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal))\}$ .....[formula45]

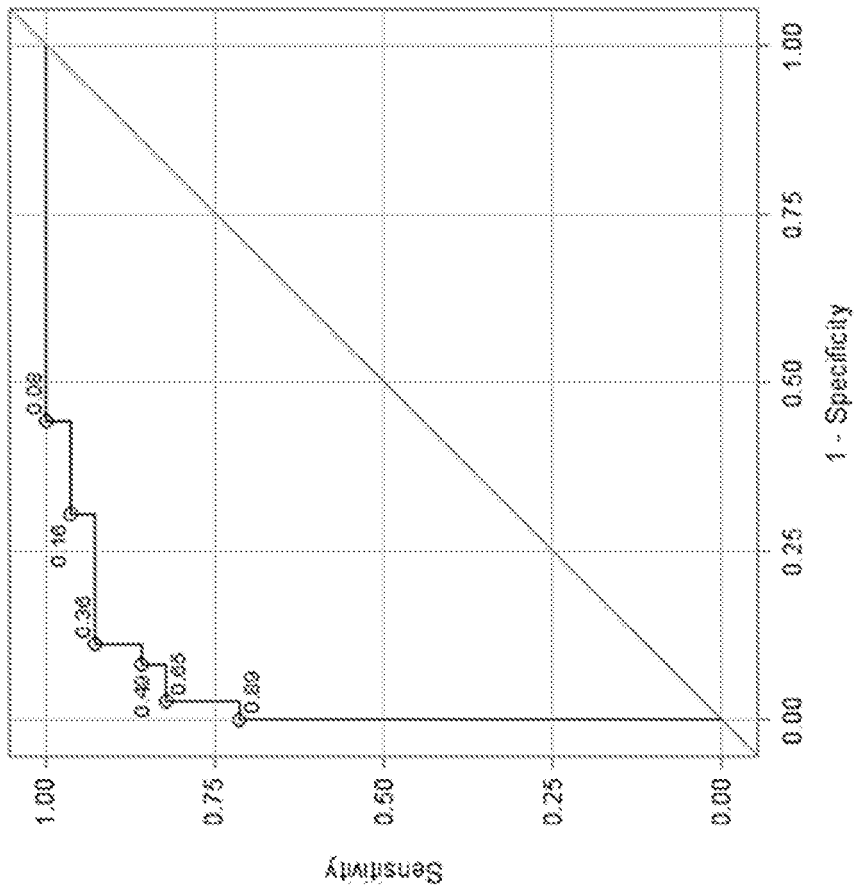


Fig.48

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 686.7\text{-}39.5482 \times (hsa\text{-}mir\text{-}1224\text{-}5\,p(Tumor))\text{-}3.4770 \times (hsa\text{-}mir\text{-}1224\text{-}5\,p(Normal))$
$\text{-}3.9820 \times (hsa\text{-}miR\text{-}518b(Tumor))\text{-}1.8738 \times (hsa\text{-}miR\text{-}518b(Normal))$
$+ 4.3659 \times (hsa\text{-}miR\text{-}629(Tumor))\text{-}3.2831 \times (hsa\text{-}miR\text{-}629(Normal)) \times \text{-}1.9722 \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Tumor))$
$\text{-}43.7972 \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal))\text{-}12.8521 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor))\text{-}2.4551 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Normal))$
$\text{-}21.4547 \times (hsa\text{-}miR\text{-}223 * (Tumor)) + 4.2892 \times (hsa\text{-}miR\text{-}223 * (Normal))$
$+ 4.8087 \times \{(hsa\text{-}mir\text{-}1224\text{-}5\,p(Tumor)) \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal))\}$
$+ 1.1145 \times \{(hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor)) \times (hsa\text{-}miR\text{-}223 * (Tumor))\}$ .....[formula46]

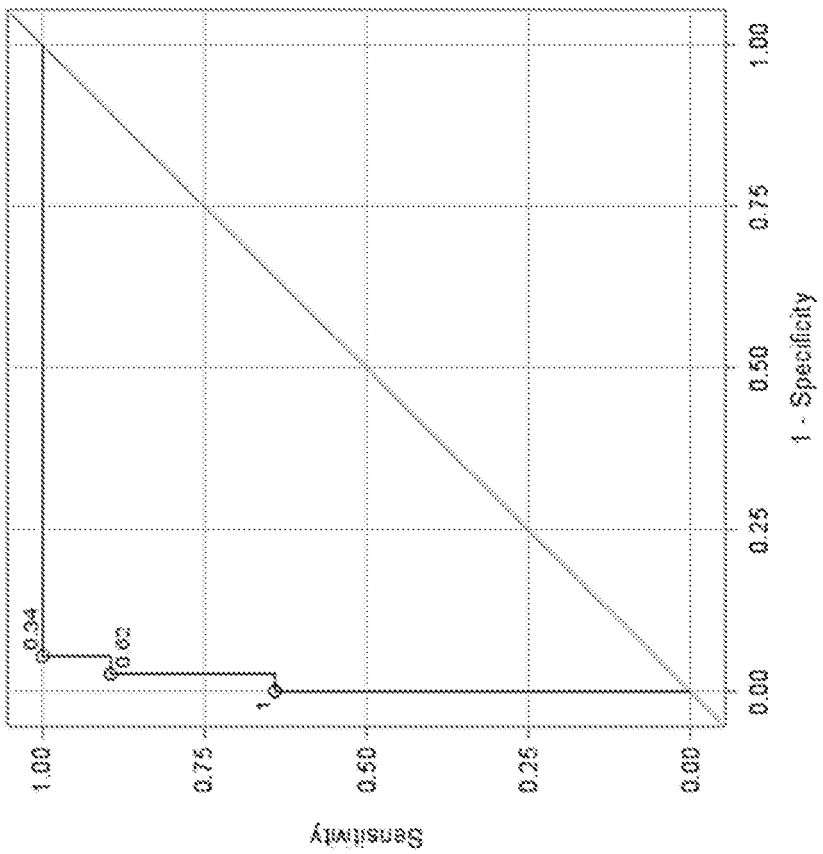


Fig.49

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 2.7536 - 0.1802 \times (hsa\text{-}mir_1224\text{-}5\ p(Tumor)) + 0.5144 \times (hsa\text{-}mir_1224\text{-}5\ p(Normal)) + 3.9232 \times (hsa\text{-}miR\text{-}518b(Tumor))$

$+ 0.0165 \times (hsa\text{-}miR\text{-}629(Tumor)) - 1.0602 \times (hsa\text{-}miR\text{-}629(Normal)) + 0.2619 \times (hsa\text{-}miR\text{-}885\text{-}5\ p(Normal)) - 2.5254 \times (hsa\text{-}miR\text{-}223*(Tumor))$

$-0.0918 \times (hsa\text{-}miR\text{-}223*(Normal)) - 1.2438 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Tumor)) - 2.1279 \times (hsa\text{-}mir\text{-}139\text{-}3\ p(Normal)) + 1.7237 \times (hsa\text{-}miR\text{-}1290(Normal))$

.....formula47

Fig.50

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 6.6549 - 0.386 \times (hsa\text{-}mir_1224\text{-}5p(Tumor)) - 0.076 \times (hsa\text{-}mir_1224\text{-}5p(Normal)) + 4.7078 \times (hsa\text{-}miR\text{-}518b(Tumor))$

$+ 1.039 \times (hsa\text{-}miR\text{-}629(Tumor)) - 0.6502 \times (hsa\text{-}miR\text{-}629(Normal)) - 1.2053 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 2.7223 \times (hsa\text{-}miR\text{-}223*(Tumor))$

$+ 1.4863 \times (hsa\text{-}miR\text{-}223*(Normal)) - 0.6587 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor)) - 0.6084 \times (hsa\text{-}mir\text{-}139\text{-}3p(Normal)) - 2.5607 \times (hsa\text{-}miR\text{-}655(Tumor))$

--- formula48

Fig.51

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 6.6705 - 0.3024 \times (hsa\text{-}mir_1224\text{-}5\,p(Tumor)) + 0.3688 \times (hsa\text{-}mir_1224\text{-}5\,p(Normal)) + 4.8481 \times (hsa\text{-}miR\text{-}518b(Tumor))$

$+ 0.7677 \times (hsa\text{-}miR\text{-}629(Tumor)) - 0.9314 \times (hsa\text{-}miR\text{-}629(Normal)) - 0.2590 \times (hsa\text{-}miR\text{-}885\text{-}5\,p(Normal)) - 2.8268 \times (hsa\text{-}miR\text{-}223*(Tumor))$

$+ 0.5100 \times (hsa\text{-}miR\text{-}223*(Normal)) - 1.1924 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Tumor)) - 1.8470 \times (hsa\text{-}mir\text{-}139\text{-}3\,p(Normal)) - 1.7363 \times (hsa\text{-}miR\text{-}655(Tumor))$

$+ 1.1398 \times (hsa\text{-}miR\text{-}1290(Normal))$ *formula49*

Fig.52

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 10.1195 - 0.3503 \times (hsa\text{-}mir_1224\text{-}5p(Tumor)) + 0.9442 \times (hsa\text{-}mir_1224\text{-}5p(Normal)) + 8.7184 \times (hsa\text{-}miR\text{-}518b(Tumor))$
$+ 2.2476 \times (hsa\text{-}miR\text{-}629(Tumor)) - 1.4460 \times (hsa\text{-}miR\text{-}629(Normal)) - 0.2093 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal))$
$-4.9632 \times (hsa\text{-}miR\text{-}223*(Tumor)) + 0.5182 \times (hsa\text{-}miR\text{-}223*(Normal)) - 2.5481 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor))$
$-2.6980 \times (hsa\text{-}mir\text{-}139\text{-}3p(Normal)) - 1.8716 \times (hsa\text{-}miR\text{-}655(Tumor)) + 1.9734 \times (hsa\text{-}miR\text{-}1290(Normal))$
$-2.4953 \times (hsa\text{-}miR\text{-}450b\text{-}5p(Tumor))$ formula50

Fig.53

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = -36.0574 - 0.1379 \times (hsa\text{-}mir_1224\text{-}5p(Tumor)) + 0.9103 \times (hsa\text{-}mir_1224\text{-}5p(Normal)) + 9.3755 \times (hsa\text{-}miR\text{-}518b(Tumor)) + 1.8323 \times (hsa\text{-}miR\text{-}629(Tumor)) - 5.6923 \times (hsa\text{-}miR\text{-}629(Normal)) - 2.6627 \times (hsa\text{-}miR\text{-}885\text{-}5p(Normal)) - 5.7424 \times (hsa\text{-}miR\text{-}223*(Tumor)) + 0.3687 \times (hsa\text{-}miR\text{-}223*(Normal)) - 0.0543 \times (hsa\text{-}mir\text{-}139\text{-}3p(Tumor)) + 1.4675 \times (hsa\text{-}mir\text{-}139\text{-}3p(Normal)) - 5.4301 \times (hsa\text{-}miR\text{-}655(Tumor)) + 0.0991 \times (hsa\text{-}miR\text{-}1290(Normal)) + 6.8188 \times (hsa\text{-}miR\text{-}450b\text{-}5p(Normal))$.....formula51

Fig.54

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 9.2339 + 24.1839 \times (hsa\text{-}miR\text{-}363^*) + 1.8440 \times (hsa\text{-}miR\text{-}1255b) + 89.2277 \times (hsa\text{-}miR\text{-}566)$
$+ 63.7366 \times (hsa\text{-}miR\text{-}1265) - 26.6886 \times (hsa\text{-}mir\text{-}127\text{-}5p) - 37.9903 \times (hsa\text{-}mir\text{-}338\text{-}5p)$
$+ 161643 \times (hsa\text{-}mir\text{-}550a^*) + 26.7510 \times (hsa\text{-}mir\text{-}588) - 13.2247 \times (hsa\text{-}mir\text{-}651) - 6.9598 \times (hsa\text{-}mir\text{-}223^*)$
$-52.5500 \times (hsa\text{-}mir\text{-}518b) - 1.6841 \times (hsa\text{-}mir\text{-}629) + 10.7469 \times (hsa\text{-}mir\text{-}885\text{-}5p) - 26.0437 \times (hsa\text{-}mir\text{-}139\text{-}3p)$
$+ 5.4643 \times (hsa\text{-}mir\text{-}1224\text{-}5p)$

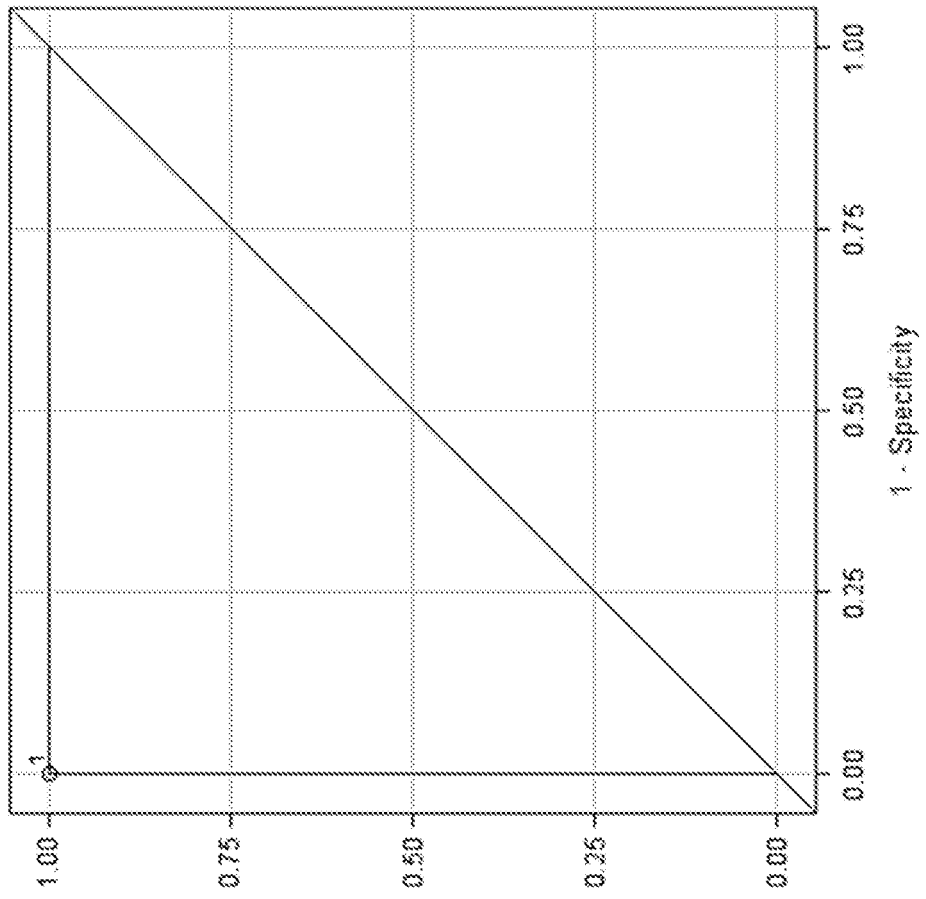


Fig.55

Recurrence score = exp(y)/(1 + exp(y)); in which y

y = -12.0054 -83.8587 ×(*hsa-miR*-363*)-8.4239 ×(*hsa-miR*-1255*b*) + 104.5000 ×(*hsa-miR*-566)
+ 59.3283×(*hsa-miR*-1265)-8.4693 ×(*hsa-mir*-127-5 *p*)-13.1045 ×(*hsa-mir*-338-5 *p*)
-6.5275 ×(*hsa-mir*-550*a**) + 19.0586×(*hsa-mir*-588) + 2.1281×(*hsa-mir*-655)
+ 7.5022 ×(*hsa-mir*-1290)-8.7410 ×(*hsa-mir*-450-5 *p*)

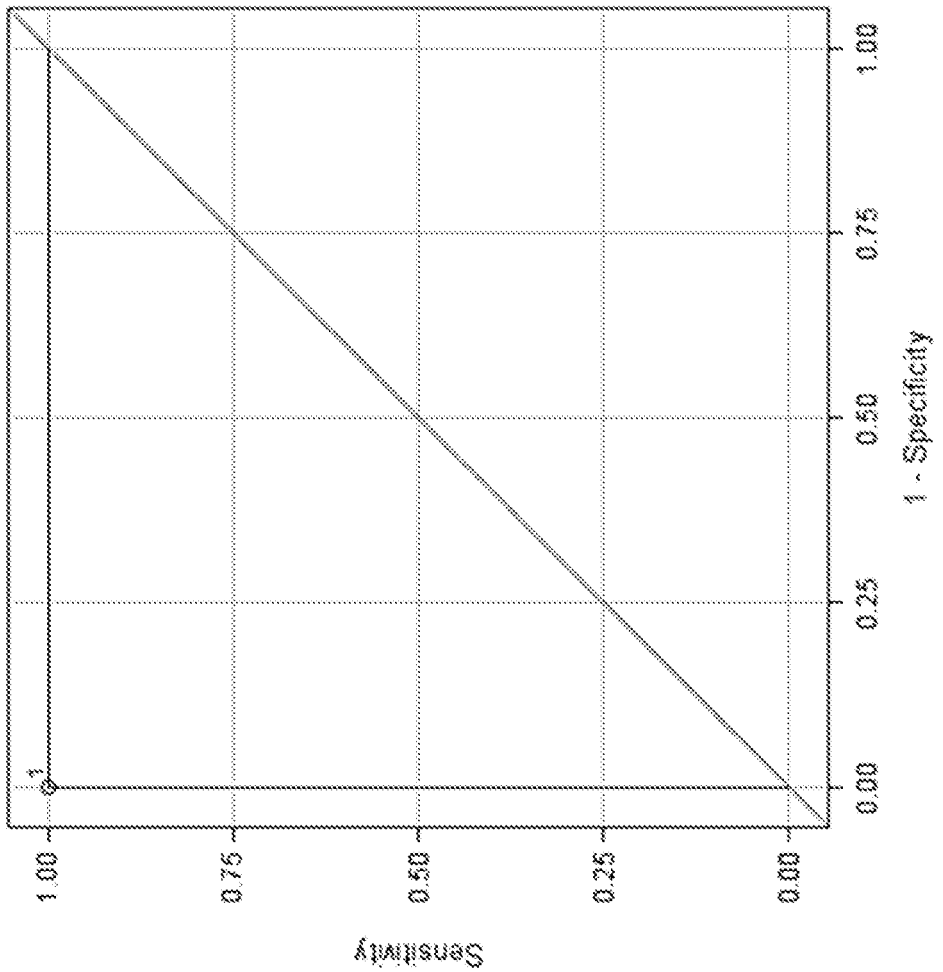


Fig.56

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 4.7039 + 18.0643 \times (hsa\text{-}miR\text{-}363^{*}) - 2.7715 \times (hsa\text{-}miR\text{-}1255b) + 44.9416 \times (hsa\text{-}miR\text{-}566)$
$+ 38.4025 \times (hsa\text{-}miR\text{-}1265) - 16.3826 \times (hsa\text{-}mir\text{-}127\text{-}5p) - 19.9281 \times (hsa\text{-}mir\text{-}338\text{-}5p)$
$+ 6.6695 \times (hsa\text{-}mir\text{-}350a^{*}) + 13.2860 \times (hsa\text{-}mir\text{-}588) - 1.3648 \times (hsa\text{-}mir\text{-}651) - 29.2228 \times (hsa\text{-}mir\text{-}518b)$
$- 2.6360 \times (hsa\text{-}mir\text{-}629) - 3.3134 \times (hsa\text{-}mir\text{-}885\text{-}5p) - 4.9860 \times (hsa\text{-}mir\text{-}139\text{-}3p)$
$+ 4.2604 \times (hsa\text{-}mir\text{-}1224\text{-}5p) - 3.7123 \times (hsa\text{-}mir\text{-}655)$

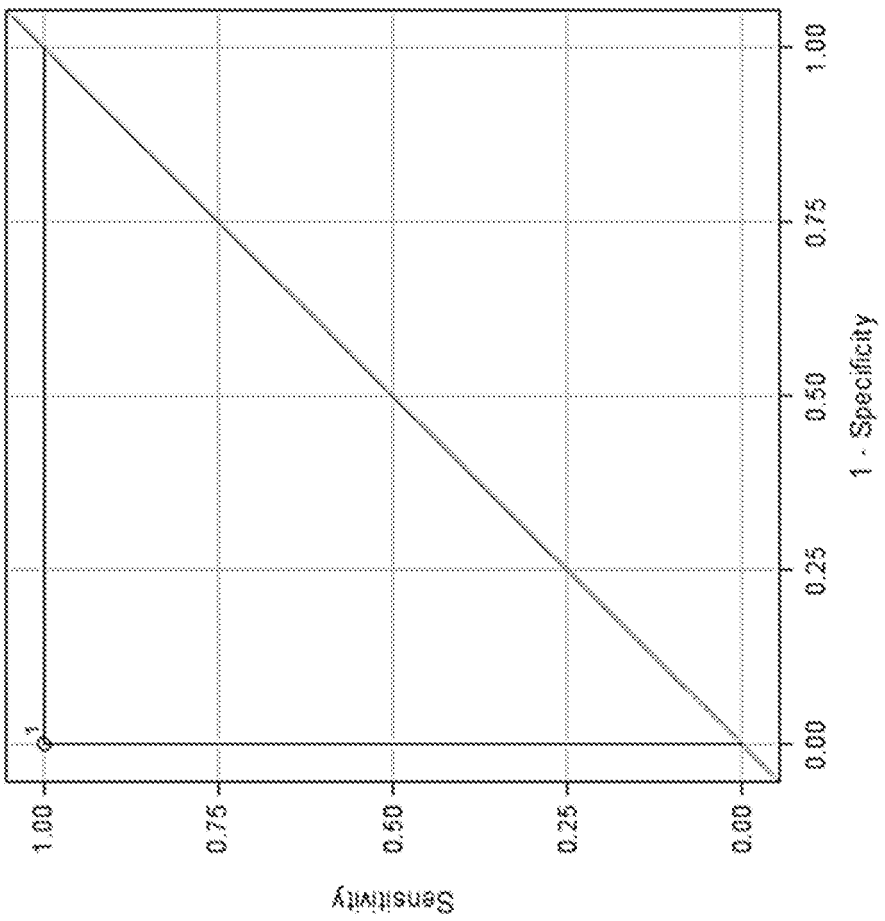


Fig.57

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = 1.4780 + 42.1028 \times (hsa\text{-}miR\text{-}363^{*}) - 15.1928 \times (hsa\text{-}miR\text{-}1255b) + 51.9263 \times (hsa\text{-}miR\text{-}566) + 14.9704 \times (hsa\text{-}mir\text{-}651) - 11.2589 \times (hsa\text{-}mir\text{-}518b) - 2.0037 \times (hsa\text{-}mir\text{-}629) - 1.3359 \times (hsa\text{-}mir\text{-}885\text{-}5p) + 10.3658 \times (hsa\text{-}mir\text{-}139\text{-}3p) - 0.7143 \times (hsa\text{-}mir\text{-}1224\text{-}5p) - 19.3261 \times (hsa\text{-}mir\text{-}655)$

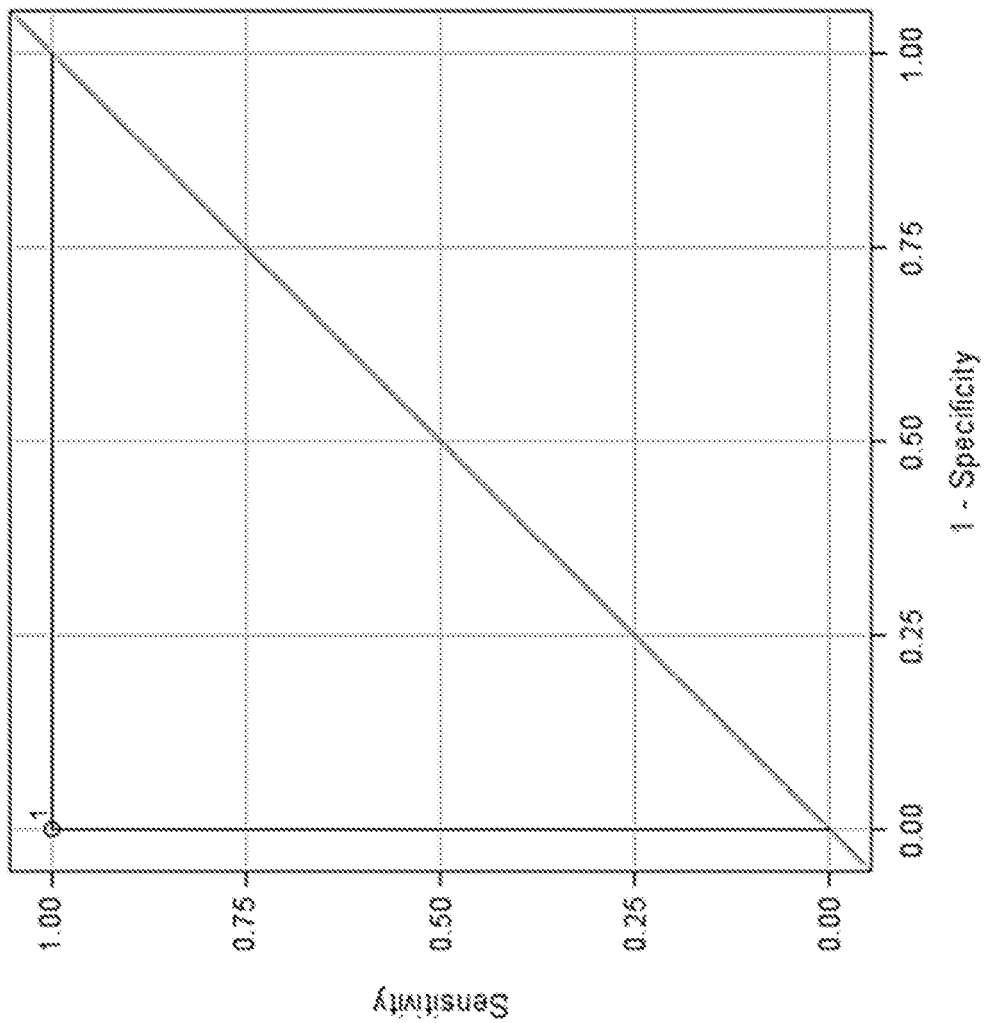


Fig.58

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = -11.6353 - 8.4203 \times (hsa\text{-}miR\text{-}363^{*}) + 9.7013 \times (hsa\text{-}miR\text{-}1255b) + 87.6723 \times (hsa\text{-}miR\text{-}566) + 52.7557 \times (hsa\text{-}miR\text{-}1265) - 11.0997 \times (hsa\text{-}mir\text{-}127\text{-}5p) - 13.0881 \times (hsa\text{-}mir\text{-}338\text{-}5p) - 14.9692 \times (hsa\text{-}mir\text{-}655) + 6.4446 \times (hsa\text{-}mir\text{-}1290) - 0.0665 \times (hsa\text{-}mir\text{-}450\text{-}5p)$

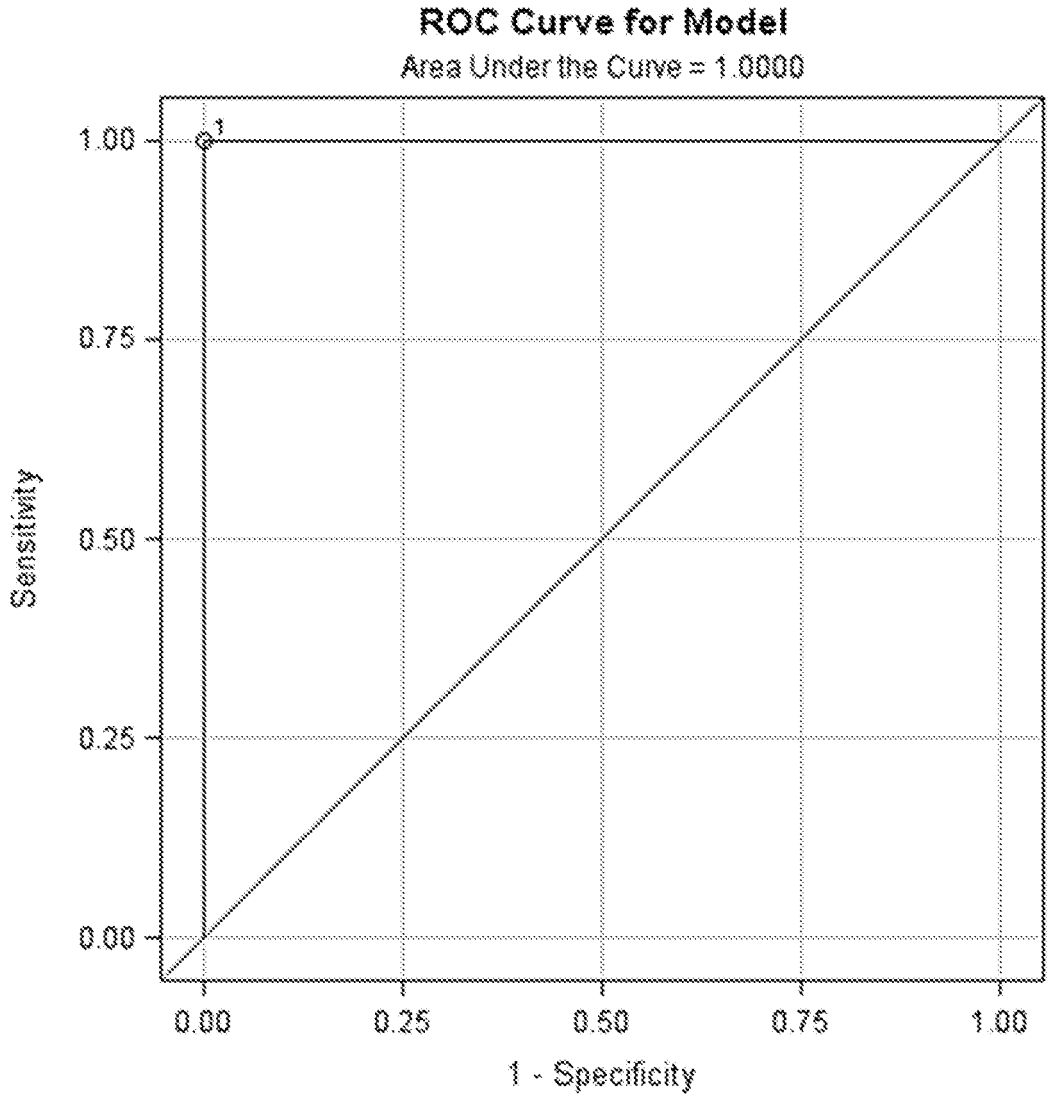


Fig.59

Recurrence score = exp(y)/(1 + exp(y)); in which y

$y = -8.9870 - 9.6311 \times (hsa\text{-}mir\text{-}550a^{*}) + 34.8785 \times (hsa\text{-}mir\text{-}588) - 32.4082 \times (hsa\text{-}mir\text{-}518b) + 5.2230 \times (hsa\text{-}mir\text{-}629) - 7.6956 \times (hsa\text{-}mir\text{-}885\text{-}5p) + 13.0274 \times (hsa\text{-}mir\text{-}139\text{-}3p) - 4.9384 \times (hsa\text{-}mir\text{-}1224\text{-}5p)$

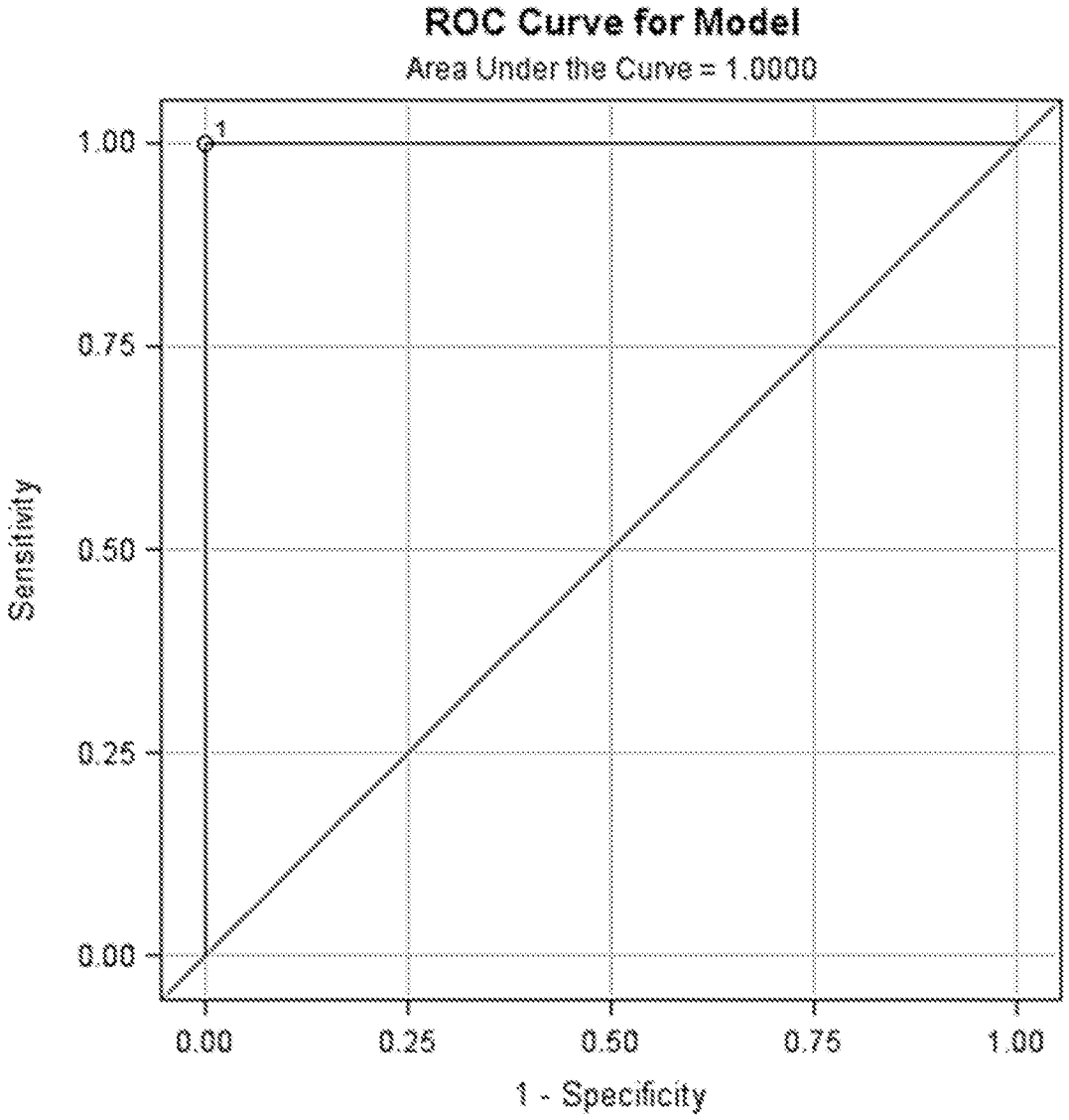


Fig.60