## Predicting treatment response using shallow whole genome sequencing of cell-free DNA using in patients with metastatic Her2+ve breast cancer.

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 $\mbox{\tt \#\#}$  'select()' returned 1:many mapping between keys and columns

Abstract

Introduction

Methods

Results

Discussion

Conclusion

## Tables

Measure	value	N
Age at primary diagnosis	(0,40]	4
	(40,50]	10
	(50,60]	17
	(60,70]	9
	(70,120]	8
Race	White	47
	Unknown	1
Primary receptor status	ER Negative, HER2 Positive	8
	ER Positive, HER2 Positive	36
	Indeterminate	3
Grade at primary diagnosis	I	1
	II	17
	III	27
	Unknown	3
Vital status	Alive	13
	Deceased	35

Measure Comparison

Time Dependent Cox Model

Progression Free Survival

ichor CNA. default

0.860\*\*\*

1.370\*\*\*

(0.210)

(0.437)

t.Mad

0.503\*\*\*

-0.645

(0.161)

(1.240)

ichor CNA.low

0.383\*\*\*

0.366

(0.126)

(0.517)

z.OR

0.444\*\*\*

-0.358

(0.162)

(0.730)

absolute
0.432***
0.122
(0.165)
(0.258)
AIC
135.1
143.9
145
145.7
146.1
140.6
Concordance
0.809
0.767
0.798
0.704
0.607
0.772
R2
0.092
0.043
0.036
0.032
0.030
0.106
Log Likelihood
-66.600
-71.000
-71.500
-71.800

-72.000 -65.300 Wald Test 16.800\*\*\* 9.750\*\*\*

- 9.180\*\*\*
- 7.490\*\*\*
- 6.830\*\*\*
- 19.700\*\*\*
- LR Test
- 16.000\*\*\*
- 7.220\*\*\*
- 6.160\*\*
- 5.480\*\*
- 5.060\*\*
- 18.600\*\*\*
- Score (Logrank) Test
- 30.200\*\*\*
- 15.800\*\*\*
- 15.400\*\*\*
- 9.590\*\*\*
- 8.240\*\*\*
- 31.200\*\*\*

Note:

*p*<0.1; *p*<0.05; p<0.01

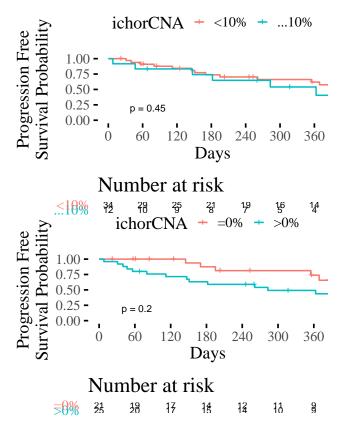
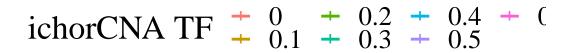


Figure 1: Cox propotional hazard models based on ichor CNA as a predictor  $(\# {\it fig:} {\it survival.} {\it cox.} {\it ichor.} {\it cut.} {\it plot})$ 



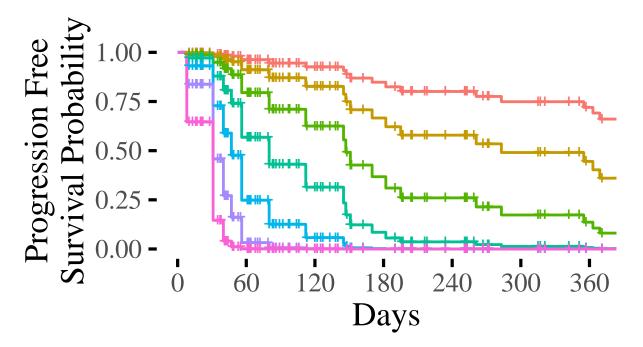


Figure 2: Time-dependent Cox regression using ichor CNA as a predictor (#fig:survival.AG.ichor.cont.plot)

## ichorCNA TF + <7% + ...7%

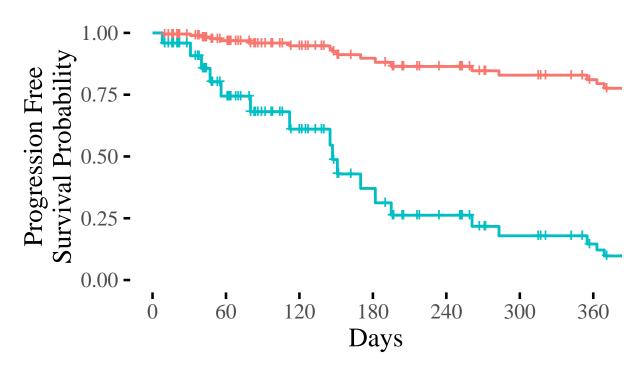


Figure 3: Optimal thresholding of a time-dependent Cox regression using ichorCNA as a predictor (#fig:survival.AG.ichor.cut.plot)

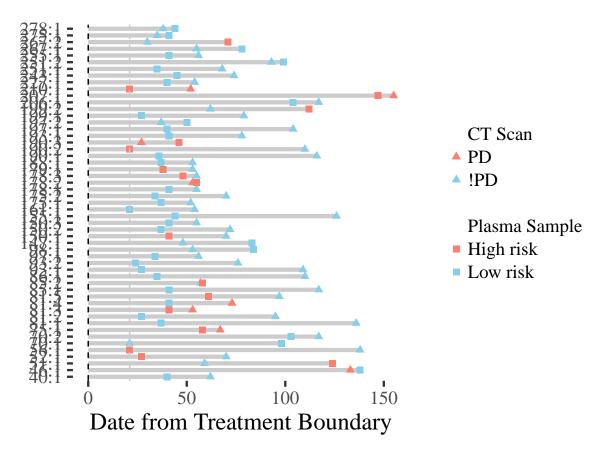


Figure 4: Overview of treatment boundaries within DETECT Her2+ve cohort (#fig:boundaries.overview.plot)

## **Figures**

Cor. calc. w.r.t. 

1st ctDNA sample Last ctDNA san
Primary biopsy Metastatic Biop

