

Package: odds.n.ends (via r-universe)

September 9, 2024

Title Odds Ratios, Contingency Table, and Model Significance from a Generalized Linear Model Object

Version 0.1.4

Imports MASS

Description Computes odds ratios and 95% confidence intervals from a generalized linear model object. It also computes model significance with the chi-squared statistic and p-value and it computes model fit using a contingency table to determine the percent of observations for which the model correctly predicts the value of the outcome. Calculates model sensitivity and specificity.

License CC0

Encoding UTF-8

LazyData true

RoxygenNote 7.1.1

Suggests knitr, rmarkdown

VignetteBuilder knitr

NeedsCompilation no

Author Jenine Harris [aut, cre]

Maintainer Jenine Harris <harrisj@wustl.edu>

Repository <https://jenineharris.r-universe.dev>

RemoteUrl <https://github.com/jenineharris/odds.n.ends>

RemoteRef HEAD

RemoteSha fb3f8c10bb22bc4c3e4493a53762043bd0e61bc6

Contents

odds.n.ends	2
Index	3

`odds.n.ends`*A binary logistic regression function*

Description

This function allows you to compute model significance (model chi-squared), model fit (percent correctly predicted, sensitivity, specificity), ROC plot, predicted probability plot, and odds ratios with 95 percent confidence intervals for a glm object from a binary logistic regression analysis.

Usage

```
odds.n.ends(  
  mod,  
  thresh = 0.5,  
  rocPlot = FALSE,  
  predProbPlot = FALSE,  
  color1 = "#7463AC",  
  color2 = "deeppink"  
)
```

Arguments

<code>mod</code>	is a glm object
<code>thresh</code>	is the threshold between 0-1 for predicted prob to be considered a case
<code>rocPlot</code>	is TRUE or FALSE to display an ROC plot
<code>predProbPlot</code>	is TRUE or FALSE to display predicted prob histogram by outcome value
<code>color1</code>	choose color for plot
<code>color2</code>	choose 2nd color for plot

Examples

```
sick <- c(0, 0, 0, 0, 1, 1, 1, 1, 1, 0, 0, 0, 0, 1, 1, 1, 1, 1, 1)  
age <- c(23, 25, 26, 34, 54, 46, 48, 95, 81, 42, 62, 25, 31, 49, 57, 52, 54, 63, 61, 50)  
logisticModel <- glm(sick ~ age, na.action = na.exclude, family = binomial(logit))  
odds.n.ends(mod = logisticModel)
```

Index

- * **fit**
odds . n . ends, [2](#)
 - * **glm**
odds . n . ends, [2](#)
 - * **logistic**
odds . n . ends, [2](#)
 - * **odds**
odds . n . ends, [2](#)
- odds . n . ends, [2](#)