Package ‘odds.n.ends’

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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.

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Encoding UTF-8

RoxygenNote 7.1.1

Suggests knitr, rmarkdown

VignetteBuilder knitr

NeedsCompilation no

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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

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

Arguments

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

Examples

```r
sick <- c(0, 0, 0, 1, 1, 1, 1, 0, 0, 0, 1, 1, 1, 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)
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