

gtsummary

Daniel D. Sjoberg, Karissa Whiting, Margaret Hannum, Emily C. Zabor, Michael Curry

Introduction

Data Summaries

Table 1: Example data frame, `trial`

colname	label	class	values
trt	Chemotherapy Treatment	character	Drug A, Drug B
age	Age	numeric	6, 9, 10, 17 , ...
marker	Marker Level (ng/mL)	numeric	0.003, 0.005, 0.013, 0.015 , ...
stage	T Stage	factor	T1, T2, T3, T4
grade	Grade	factor	I, II, III
response	Tumor Response	integer	0, 1
death	Patient Died	integer	0, 1
ttdeath	Months to Death/Censor	numeric	3.53, 5.33, 6.32, 7.27 , ...

`tbl_summary()`

```
tbl_summary_1 <-  
  trial %>%  
  select(age, grade, response, trt) %>%  
  tbl_summary(by = trt)
```

Table 2: `tbl_summary()` function arguments

Argument	Description
<code>label</code>	specify the variable labels printed in table
<code>type</code>	specify the variable type (e.g. continuous, categorical, etc.)
<code>statistic</code>	change the summary statistics presented
<code>digits</code>	number of digits the summary statistics will be rounded to
<code>missing</code>	whether to display a row with the number of missing observations
<code>missing_text</code>	text label for the missing number row
<code>sort</code>	change the sorting of categorical levels by frequency
<code>percent</code>	print column, row, or cell percentages

```
tbl_summary_2 <-  
  trial %>%
```

```
select(age, grade, response, trt) %>%
tbl_summary(by = trt,
  label = age ~ "Patient Age",
  statistic = list(all_continuous() ~ "{mean} ({sd})",
    all_categorical() ~ "{n} / {N} ({p}%)" ),
  digits = list(age ~ 2,
    all_categorical() ~ c(0, 0, 1)),
  missing = "no")
```

Table 3: `tbl_summary()` function arguments

Function	Description
<code>add_p()</code>	add p-values to the output comparing values across groups
<code>add_overall()</code>	add a column with overall summary statistics
<code>add_n()</code>	add a column with N (or N missing) for each variable
<code>add_difference()</code>	add column for difference between two group, confidence interval, and p-value
<code>add_stat_label()</code>	add label for the summary statistics shown in each row
<code>add_stat()</code>	generic function to add a column with user-defined values
<code>add_q()</code>	add a column of q values to control for multiple comparisons

Figure 1: Simple ‘`tbl_summary()`’ example

Characteristic	Drug A, N = 98 [†]	Drug B, N = 102 [†]
Age	46 (37, 59)	48 (39, 56)
Unknown	7	4
Grade		
I	35 (36%)	33 (32%)
II	32 (33%)	36 (35%)
III	31 (32%)	33 (32%)
Tumor Response	28 (29%)	33 (34%)
Unknown	3	4
[†] Median (IQR); n (%)		

`tbl_svysummary()`

`tbl_cross()`

`tbl_survfit()`

Customization

Model Summaries

`tbl_regression()`

`tbl_uvregression()`

In-line Reporting

Merging and Stacking

Themes

Print Engines