gtsummary + R Markdown

library(gtsummary)  
library(tidyverse)

## -- Attaching packages ---------------------------------------------------------------- tidyverse 1.3.0 --

## v ggplot2 3.3.0 v purrr 0.3.3  
## v tibble 3.0.0 v dplyr 0.8.5  
## v tidyr 1.0.2 v stringr 1.4.0  
## v readr 1.3.1 v forcats 0.5.0

## -- Conflicts ------------------------------------------------------------------- tidyverse\_conflicts() --  
## x dplyr::filter() masks stats::filter()  
## x dplyr::lag() masks stats::lag()

library(survival)  
  
knitr::opts\_knit$get('rmarkdown.pandoc.to')

## [1] "docx"

# knitr::knit\_exit()

## gtsummary tables

Tables created with {gtsummary} can be integrated into R markdown documents. The {gtsummary} package was written to be a companion to the [{gt} package](https://gt.rstudio.com/) from RStudio, and {gtsummary} tables are printed using {gt} when possible. Currently, {gt} supports **HTML** output, with **LaTeX** and **RTF** planned for the future.

patient\_characteristics <-  
 trial %>%  
 select(trt, age, grade, response) %>%  
 tbl\_summary(by = trt)   
patient\_characteristics

## Table printed with `knitr::kable()`, not {gt}. Learn why at  
## http://www.danieldsjoberg.com/gtsummary/dev/articles/print.html  
## To suppress this message, include `message = FALSE` in the code chunk header.

|  |  |  |
| --- | --- | --- |
| **Characteristic** | **Drug A**, N = 98 | **Drug B**, N = 102 |
| Age, yrs | 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 |

With HTML ouput, you can include complex tables with footnotes, indendtation, and spanning table headers.

# Side-by-side Regression Models  
# logistic regresssion model  
t1 <-  
 glm(response ~ trt + grade + age, trial, family = binomial) %>%  
 tbl\_regression(exponentiate = TRUE)  
# time to death Cox model  
t2 <-  
 coxph(Surv(ttdeath, death) ~ trt + grade + age, trial) %>%  
 tbl\_regression(exponentiate = TRUE)  
  
# printing merged table  
tbl\_merge(  
 tbls = list(t1, t2),  
 tab\_spanner = c("\*\*Tumor Response\*\*", "\*\*Time to Death\*\*")  
)

## Table printed with `knitr::kable()`, not {gt}. Learn why at  
## http://www.danieldsjoberg.com/gtsummary/dev/articles/print.html  
## To suppress this message, include `message = FALSE` in the code chunk header.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **OR** | **95% CI** | **p-value** | **HR** | **95% CI** | **p-value** |
| Chemotherapy Treatment |  |  |  |  |  |  |
| Drug A |  |  |  |  |  |  |
| Drug B | 1.13 | 0.60, 2.13 | 0.7 | 1.30 | 0.88, 1.92 | 0.2 |
| Grade |  |  |  |  |  |  |
| I |  |  |  |  |  |  |
| II | 0.85 | 0.39, 1.85 | 0.7 | 1.21 | 0.73, 1.99 | 0.5 |
| III | 1.01 | 0.47, 2.15 | >0.9 | 1.79 | 1.12, 2.86 | 0.014 |
| Age, yrs | 1.02 | 1.00, 1.04 | 0.10 | 1.01 | 0.99, 1.02 | 0.3 |

## inline reporting

Any number/statistic from a {gtsummary} table can be reported inline in a R markdown document using the inline\_text() function. See example below:

Among patients who received Drug A, 31 (32%) had grade III tumors.

For detailed examples using functions from {gtsummary}, visit the [{gtsummary} website](http://www.danieldsjoberg.com/gtsummary/).