Simple Tables Demo Doc

Contents

1 Data

Mostly working with this data; but some others come in later to illustrate certain features.

```
library(pmtables)
library(yspec)
spec <- ys_help$spec()

data <- pmt_summarized

head(data)
```

```
## # A tibble: 6 x 9
##   STUDY       DOSE   FORM    N     WT    CRCL  AGE   ALB   SCR
##   <chr>       <chr>  <chr>   <chr> <chr> <chr> <chr> <chr> <chr>
## 1 12-DEMO-001 100 mg tablet  80    71.4  104   33.7  4.20  1.06
## 2 12-DEMO-001 150 mg capsule 16    89.4  122   24.4  4.63  1.12
## 3 12-DEMO-001 150 mg tablet  48    81.7  104   34.4  3.83  0.910
## 4 12-DEMO-001 150 mg troche  16    94.0  93.2  27.4  4.94  1.25
## 5 12-DEMO-001 200 mg tablet  64    67.9  100   27.5  4.25  1.10
## 6 12-DEMO-001 200 mg troche  16    76.6  99.2  22.8  4.54  1.15
```

2 wrap

There is a wrap function in this document. Don't worry about that; it just puts the output into a table environment and sends the output to get rendered in markdown.

3 Simple table

- A data frame is wrapped in tabular environment
- The table is created with threeparttable

```
data %>% stable(cols_bold=TRUE) %>% pt_wrap(stdout())
```

STUDY	DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
12-DEMO-001	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
12-DEMO-001	150 mg	tablet	48	81.7	104	34.4	3.83	0.910
12-DEMO-001	150 mg	troche	16	94.0	93.2	27.4	4.94	1.25
12-DEMO-001	200 mg	tablet	64	67.9	100	27.5	4.25	1.10
12-DEMO-001	200 mg	troche	16	76.6	99.2	22.8	4.54	1.15
12-DEMO-002	100 mg	capsule	36	61.3	113	38.3	4.04	1.28
12-DEMO-002	100 mg	tablet	324	77.6	106	29.9	4.31	0.981
12-DEMO-002	50 mg	capsule	36	74.1	112	37.1	4.44	0.900
12-DEMO-002	50 mg	tablet	324	71.2	106	34.1	4.63	0.868
12-DEMO-002	75 mg	capsule	36	72.4	105	38.2	3.89	0.900
12-DEMO-002	75 mg	tablet	288	71.6	98.9	34.2	4.49	0.991
12-DEMO-002	75 mg	troche	36	73.6	103	49.2	4.52	0.930

4 Annotate

- Arguments to identify the name of the generating R script and the output file name
- The output file name is retained as an attribute to be used later when saving the table data
- Arbitrary notes are also allowed, provided as a character vector; item in the vector is placed on its own line

```
stable(
  data,
  r_file = "foo.R",
  output_file = "foo.tex",
  notes = c("Data were analyzed in quadruplicate.", "The results are very clear."),
) %>% pt_wrap(stdout())
```

STUDY	DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
12-DEMO-001	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
12-DEMO-001	150 mg	tablet	48	81.7	104	34.4	3.83	0.910
12-DEMO-001	150 mg	troche	16	94.0	93.2	27.4	4.94	1.25
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12-DEMO-002	100 mg	tablet	324	77.6	106	29.9	4.31	0.981
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12-DEMO-002	75 mg	troche	36	73.6	103	49.2	4.52	0.930

Data were analyzed in quadruplicate.
The results are very clear.
Source code: foo.R
Source file: foo.tex

5 Notes in minipage

- By default, notes are put in the 3rd part of threeparttable
- Alternatively, we can put them in a minipage just below the table
- The width of the minipage needs to be set by the user

```
stable(
  data,
  note_config = noteconf(type = "minipage", width = 0.85),
  notes = c("Data were analyzed in quadruplicate.", "The results are very clear."),
) %>% pt_wrap(stdout())
```

STUDY	DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
12-DEMO-001	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
12-DEMO-001	150 mg	tablet	48	81.7	104	34.4	3.83	0.910
12-DEMO-001	150 mg	troche	16	94.0	93.2	27.4	4.94	1.25
12-DEMO-001	200 mg	tablet	64	67.9	100	27.5	4.25	1.10
12-DEMO-001	200 mg	troche	16	76.6	99.2	22.8	4.54	1.15
12-DEMO-002	100 mg	capsule	36	61.3	113	38.3	4.04	1.28
12-DEMO-002	100 mg	tablet	324	77.6	106	29.9	4.31	0.981
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12-DEMO-002	75 mg	troche	36	73.6	103	49.2	4.52	0.930

Data were analyzed in quadruplicate.
The results are very clear.

6 Align

- Columns can be aligned center, left or right
- Columns can be aligned with a fixed with and aligned left, center or right
- Helper functions are provided as `cols_center()`, `cols_left()`, `cols_right()`
- The syntax is to state the default / base alignment for all columns and then pass exceptions to that default setting
- Center everything except for
  - `STUDY` (left)
  - `DOSE` and `SCR` (right)

```
data %>%
  stable(align = cols_center(STUDY = 'l', .r = "DOSE,SCR")) %>%
  pt_wrap(stdout())
```

STUDY	DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
12-DEMO-001	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
12-DEMO-001	150 mg	tablet	48	81.7	104	34.4	3.83	0.910
12-DEMO-001	150 mg	troche	16	94.0	93.2	27.4	4.94	1.25
12-DEMO-001	200 mg	tablet	64	67.9	100	27.5	4.25	1.10
12-DEMO-001	200 mg	troche	16	76.6	99.2	22.8	4.54	1.15
12-DEMO-002	100 mg	capsule	36	61.3	113	38.3	4.04	1.28
12-DEMO-002	100 mg	tablet	324	77.6	106	29.9	4.31	0.981
12-DEMO-002	50 mg	capsule	36	74.1	112	37.1	4.44	0.900
12-DEMO-002	50 mg	tablet	324	71.2	106	34.1	4.63	0.868
12-DEMO-002	75 mg	capsule	36	72.4	105	38.2	3.89	0.900
12-DEMO-002	75 mg	tablet	288	71.6	98.9	34.2	4.49	0.991
12-DEMO-002	75 mg	troche	36	73.6	103	49.2	4.52	0.930

7 Units

- Automatically put units under the column name
- Units are supplied as a named list, where names correspond with the column name prior to renaming
- The list can contain a subset of columns and can also contain names that are not in the table (there is no warning or error for the latter)

```
units <- ys_get_unit(spec, parens = TRUE)

stable(
  data,
  units = units,
) %>% pt_wrap(stdout())
```

STUDY	DOSE	FORM	N	WT (kg)	CRCL (ml/min)	AGE (years)	ALB (g/dL)	SCR (mg/dL)
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
12-DEMO-001	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
12-DEMO-001	150 mg	tablet	48	81.7	104	34.4	3.83	0.910
12-DEMO-001	150 mg	troche	16	94.0	93.2	27.4	4.94	1.25
12-DEMO-001	200 mg	tablet	64	67.9	100	27.5	4.25	1.10
12-DEMO-001	200 mg	troche	16	76.6	99.2	22.8	4.54	1.15
12-DEMO-002	100 mg	capsule	36	61.3	113	38.3	4.04	1.28
12-DEMO-002	100 mg	tablet	324	77.6	106	29.9	4.31	0.981
12-DEMO-002	50 mg	capsule	36	74.1	112	37.1	4.44	0.900
12-DEMO-002	50 mg	tablet	324	71.2	106	34.1	4.63	0.868
12-DEMO-002	75 mg	capsule	36	72.4	105	38.2	3.89	0.900
12-DEMO-002	75 mg	tablet	288	71.6	98.9	34.2	4.49	0.991
12-DEMO-002	75 mg	troche	36	73.6	103	49.2	4.52	0.930

8 Expand header rows

- Multiline table header
- Unlimited number
- Use `...` to break
- Units go on the bottom row when they are supplied
- Items are always pushed to the bottom

```
stable(
  data,
  cols_rename = vars("Study...Number" = STUDY, "Serum...Albumin" = ALB),
  units = units
) %>% pt_wrap(stdout())
```

Study Number	DOSE	FORM	N	WT (kg)	CRCL (ml/min)	AGE (years)	Serum Albumin (g/dL)	SCR (mg/dL)
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
12-DEMO-001	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
12-DEMO-001	150 mg	tablet	48	81.7	104	34.4	3.83	0.910
12-DEMO-001	150 mg	troche	16	94.0	93.2	27.4	4.94	1.25
12-DEMO-001	200 mg	tablet	64	67.9	100	27.5	4.25	1.10
12-DEMO-001	200 mg	troche	16	76.6	99.2	22.8	4.54	1.15
12-DEMO-002	100 mg	capsule	36	61.3	113	38.3	4.04	1.28
12-DEMO-002	100 mg	tablet	324	77.6	106	29.9	4.31	0.981
12-DEMO-002	50 mg	capsule	36	74.1	112	37.1	4.44	0.900
12-DEMO-002	50 mg	tablet	324	71.2	106	34.1	4.63	0.868
12-DEMO-002	75 mg	capsule	36	72.4	105	38.2	3.89	0.900
12-DEMO-002	75 mg	tablet	288	71.6	98.9	34.2	4.49	0.991
12-DEMO-002	75 mg	troche	36	73.6	103	49.2	4.52	0.930

9 Math

- Columns with at least two $ are “math” and will not be sanitized
- Otherwise the are functions to “prime” the data frame
  - The default is to convert every column to character
  - Then walk the columns, look for non-math columns and sanitize them

```
ptab <- readRDS("datasets/ptab.RDS")
ptab
```

```
## # A tibble: 4 x 6
##   .type              Parameter           Symbol   Math             Estimate    SE
##   <chr>              <chr>               <chr>    <chr>               <dbl> <dbl>
## 1 Fixed-effects      Clearance           CL (L/h~ "$\\exp(\\thet~     1.22  0.4
## 2 Fixed-effects      Volume of distribu~ V2 (L)   "$\\exp(\\thet~     5.87  0.89
## 3 Fixed-effects      Absorption rate co~ KA (1/h~ "$\\theta_3$"       1.23  0.1
## 4 Unexplained varia~ Additive_error      RUV      "$\\sigma_1$"      0.02  0.01
```

```
stable(
  ptab,
  align = cols_center(Parameter =  col_ragged(3), .l = "Symbol"),
  panel = ".type"
  ) %>% pt_wrap(stdout())
```

Parameter	Symbol	Math	Estimate	SE
Fixed-effects				
Clearance	CL (L/hr)	$\exp(\theta_1)$	1.22	0.4
Volume of distribution	V2 (L)	$\exp(\theta_2)$	5.87	0.89
Absorption rate constant	KA (1/hr)	θ_3	1.23	0.1
Unexplained variability				
Additive_error	RUV	σ_1	0.02	0.01

10 hline from column

- Use the column to determine where the hline should go

```
stable(
  data,
  hline_from = "STUDY",
) %>% pt_wrap(stdout())
```

STUDY	DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
12-DEMO-001	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
12-DEMO-001	150 mg	tablet	48	81.7	104	34.4	3.83	0.910
12-DEMO-001	150 mg	troche	16	94.0	93.2	27.4	4.94	1.25
12-DEMO-001	200 mg	tablet	64	67.9	100	27.5	4.25	1.10
12-DEMO-001	200 mg	troche	16	76.6	99.2	22.8	4.54	1.15
12-DEMO-002	100 mg	capsule	36	61.3	113	38.3	4.04	1.28
12-DEMO-002	100 mg	tablet	324	77.6	106	29.9	4.31	0.981
12-DEMO-002	50 mg	capsule	36	74.1	112	37.1	4.44	0.900
12-DEMO-002	50 mg	tablet	324	71.2	106	34.1	4.63	0.868
12-DEMO-002	75 mg	capsule	36	72.4	105	38.2	3.89	0.900
12-DEMO-002	75 mg	tablet	288	71.6	98.9	34.2	4.49	0.991
12-DEMO-002	75 mg	troche	36	73.6	103	49.2	4.52	0.930

11 hline anywhere

- Give row numbers for hline as logical or integer vector

```
stable(
  data,
  hline_at = c(3,nrow(data))-1,
) %>% pt_wrap(stdout())
```

STUDY	DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
12-DEMO-001	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
12-DEMO-001	150 mg	tablet	48	81.7	104	34.4	3.83	0.910
12-DEMO-001	150 mg	troche	16	94.0	93.2	27.4	4.94	1.25
12-DEMO-001	200 mg	tablet	64	67.9	100	27.5	4.25	1.10
12-DEMO-001	200 mg	troche	16	76.6	99.2	22.8	4.54	1.15
12-DEMO-002	100 mg	capsule	36	61.3	113	38.3	4.04	1.28
12-DEMO-002	100 mg	tablet	324	77.6	106	29.9	4.31	0.981
12-DEMO-002	50 mg	capsule	36	74.1	112	37.1	4.44	0.900
12-DEMO-002	50 mg	tablet	324	71.2	106	34.1	4.63	0.868
12-DEMO-002	75 mg	capsule	36	72.4	105	38.2	3.89	0.900
12-DEMO-002	75 mg	tablet	288	71.6	98.9	34.2	4.49	0.991
12-DEMO-002	75 mg	troche	36	73.6	103	49.2	4.52	0.930

12 Remove duplicate values

- Discard repeating values in a column
- Also `clear_grouped_reps` which recursively groups by the column names supplied and clears the most distant column name in the groups

```
stable(
  data,
  clear_reps = "STUDY",
) %>% pt_wrap(stdout())
```

STUDY	DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
	150 mg	tablet	48	81.7	104	34.4	3.83	0.910
	150 mg	troche	16	94.0	93.2	27.4	4.94	1.25
	200 mg	tablet	64	67.9	100	27.5	4.25	1.10
	200 mg	troche	16	76.6	99.2	22.8	4.54	1.15
12-DEMO-002	100 mg	capsule	36	61.3	113	38.3	4.04	1.28
	100 mg	tablet	324	77.6	106	29.9	4.31	0.981
	50 mg	capsule	36	74.1	112	37.1	4.44	0.900
	50 mg	tablet	324	71.2	106	34.1	4.63	0.868
	75 mg	capsule	36	72.4	105	38.2	3.89	0.900
	75 mg	tablet	288	71.6	98.9	34.2	4.49	0.991
	75 mg	troche	36	73.6	103	49.2	4.52	0.930

13 Add styling to data frame

- `tex_bold` will make table cells bold when they match `pattern`
- `tex_it` will make table cells italics when they match `pattern`
- styling is only added when there is at least one character
- input must be string
- combine this with `clear_rep` and `hline_from` to partition the table

```
tmp <- ptdata()

tmp <- mutate(tmp, STUDY = tex_bold(as.character(STUDY)))
```

```
stable(
  tmp,
  clear_reps = "STUDY",
  hline_from = "STUDY",
) %>% pt_wrap(stdout())
```

STUDY	DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
	150 mg	tablet	48	81.7	104	34.4	3.83	0.910
	150 mg	troche	16	94.0	93.2	27.4	4.94	1.25
	200 mg	tablet	64	67.9	100	27.5	4.25	1.10
	200 mg	troche	16	76.6	99.2	22.8	4.54	1.15
12-DEMO-002	100 mg	capsule	36	61.3	113	38.3	4.04	1.28
	100 mg	tablet	324	77.6	106	29.9	4.31	0.981
	50 mg	capsule	36	74.1	112	37.1	4.44	0.900
	50 mg	tablet	324	71.2	106	34.1	4.63	0.868
	75 mg	capsule	36	72.4	105	38.2	3.89	0.900
	75 mg	tablet	288	71.6	98.9	34.2	4.49	0.991
	75 mg	troche	36	73.6	103	49.2	4.52	0.930

14 Panel

- Divide the table using column contents
- The panel column data is split in non-repeating chunks
- An error is generated if there are multiple panels with the same name; this can be overridden
- A prefix can be supplied that gets pasted on the front of the column title; the prefix can also come from the name of the supplied panel panel ID (e.g. `c(prefix_text = panel_name)`)

```
stable(
  data,
  panel = as.panel("STUDY", prefix = "Study number: "),
) %>% pt_wrap(stdout())
```

DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
Study number: 12-DEMO-001							
100 mg	tablet	80	71.4	104	33.7	4.20	1.06
150 mg	capsule	16	89.4	122	24.4	4.63	1.12
150 mg	tablet	48	81.7	104	34.4	3.83	0.910
150 mg	troche	16	94.0	93.2	27.4	4.94	1.25
200 mg	tablet	64	67.9	100	27.5	4.25	1.10
200 mg	troche	16	76.6	99.2	22.8	4.54	1.15
Study number: 12-DEMO-002							
100 mg	capsule	36	61.3	113	38.3	4.04	1.28
100 mg	tablet	324	77.6	106	29.9	4.31	0.981
50 mg	capsule	36	74.1	112	37.1	4.44	0.900
50 mg	tablet	324	71.2	106	34.1	4.63	0.868
75 mg	capsule	36	72.4	105	38.2	3.89	0.900
75 mg	tablet	288	71.6	98.9	34.2	4.49	0.991
75 mg	troche	36	73.6	103	49.2	4.52	0.930

15 Colspan

- Group columns with a spaning line and a title
- The span goes above the highest row in the column header box

```
stable(
  data,
  span = colgroup("In final model", WT:CRCL),
) %>% pt_wrap(stdout())
```

				In final model				
STUDY	DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
12-DEMO-001	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
12-DEMO-001	150 mg	tablet	48	81.7	104	34.4	3.83	0.910
12-DEMO-001	150 mg	troche	16	94.0	93.2	27.4	4.94	1.25
12-DEMO-001	200 mg	tablet	64	67.9	100	27.5	4.25	1.10
12-DEMO-001	200 mg	troche	16	76.6	99.2	22.8	4.54	1.15
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12-DEMO-002	75 mg	troche	36	73.6	103	49.2	4.52	0.930

16 Colspan - multiple

- Multiple groupings
- Multiple levels

```
stable(
  data,
  span = list(
    colgroup("Meh", DOSE:WT),
    colgroup("Hrm", AGE:CRCL),
    colgroup("Huh", ALB:SCR),
    colgroup("Expert opinion", CRCL:SCR, level = 2)
  )
) %>% pt_wrap(stdout())
```

					Expert opinion			
	Meh				Hrm		Huh	
STUDY	DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
12-DEMO-001	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
12-DEMO-001	150 mg	tablet	48	81.7	104	34.4	3.83	0.910
12-DEMO-001	150 mg	troche	16	94.0	93.2	27.4	4.94	1.25
12-DEMO-001	200 mg	tablet	64	67.9	100	27.5	4.25	1.10
12-DEMO-001	200 mg	troche	16	76.6	99.2	22.8	4.54	1.15
12-DEMO-002	100 mg	capsule	36	61.3	113	38.3	4.04	1.28
12-DEMO-002	100 mg	tablet	324	77.6	106	29.9	4.31	0.981
12-DEMO-002	50 mg	capsule	36	74.1	112	37.1	4.44	0.900
12-DEMO-002	50 mg	tablet	324	71.2	106	34.1	4.63	0.868
12-DEMO-002	75 mg	capsule	36	72.4	105	38.2	3.89	0.900
12-DEMO-002	75 mg	tablet	288	71.6	98.9	34.2	4.49	0.991
12-DEMO-002	75 mg	troche	36	73.6	103	49.2	4.52	0.930

17 Colspan - from cols

- We have some columns of the form `tag.name`
- These are split on the `sep` argument; the `tag` (common across columns in the group) forms the spanner title
- The column names are formed by splitting `tag.` off of `tag.name`

```
dotdata <- readRDS("datasets/with-dots.RDS")
head(dotdata, n=2)
```

```
## # A tibble: 2 x 7
##   STUDY       Normal.WT Normal.CRCL Normal.ALB ESRD.WT ESRD.CRCL ESRD.ALB
##   <chr>       <chr>     <chr>       <chr>      <chr>   <chr>     <chr>
## 1 12-DEMO-001 71.4      104         4.20       78.5    26.0      2.10
## 2 12-DEMO-001 81.7      104         3.83       89.9    26.1      1.92
```

```
stable(
  dotdata,
  span_split = colsplit(sep = '.'),
) %>% pt_wrap(stdout())
```

	Normal			ESRD		
STUDY	WT	CRCL	ALB	WT	CRCL	ALB
12-DEMO-001	71.4	104	4.20	78.5	26.0	2.10
12-DEMO-001	81.7	104	3.83	89.9	26.1	1.92
12-DEMO-001	89.4	122	4.63	98.4	30.6	2.32
12-DEMO-001	94.0	93.2	4.94	103	23.3	2.47
12-DEMO-001	67.9	100	4.25	74.7	25.1	2.13
12-DEMO-001	76.6	99.2	4.54	84.2	24.8	2.27
12-DEMO-002	77.6	106	4.31	85.4	26.4	2.16
12-DEMO-002	61.3	113	4.04	67.4	28.2	2.02
12-DEMO-002	71.2	106	4.63	78.3	26.4	2.32
12-DEMO-002	74.1	112	4.44	81.5	28.0	2.22
12-DEMO-002	71.6	98.9	4.49	78.8	24.7	2.25
12-DEMO-002	72.4	105	3.89	79.6	26.3	1.94
12-DEMO-002	73.6	103	4.52	81.0	25.8	2.26

18 Handle wide columns

- This shows using `col_ragged()` alignment to fix the width of a column that has a lot of text in it

18.1 `descr is` taking over the table

```
ptable <- readRDS("datasets/ptable.RDS")

stable(ptable) %>% pt_wrap(stdout())
```

symbol	descr	estimate	standard.error
CL (L)	Metabolic clearance in adults who graduated high school before 1973 and live in Muncie.	100	200

18.2 Limit `descr` to 5 cm

```
stable(
  ptable,
  align = cols_center(descr = col_ragged(5))
) %>% pt_wrap(stdout())
```

symbol	descr	estimate	standard.error	rse
CL (L)	Metabolic clearance in adults who graduated high school before 1973 and live in Muncie.	100	200	2

19 Identify a summary row

- We can point to one or more rows and style it up as a “summary row”
- The summary row can be styled
  - with a horizontal line above
  - with bold text in a designated column
  - with alternate text in a designated column
- Multiple summary rows can be specified in a list

```
df.total <- readRDS(file = "datasets/with-total.RDS")
df.total
```

```
## # A tibble: 3 x 6
##   STUDY       WT    AGE   CRCL  ALB   SCR
##   <chr>       <chr> <chr> <chr> <chr> <chr>
## 1 12-DEMO-001 80.2  28.4  104   4.40  1.10
## 2 12-DEMO-002 71.7  37.3  106   4.33  0.979
## 3 all         75.9  32.8  105   4.37  1.04
```

```
stable(
  df.total,
  sumrows = sumrow(
    df.total$STUDY == "all",
    label = "All Studies",
    bold = TRUE
  )
) %>% pt_wrap(stdout())
```

STUDY	WT	AGE	CRCL	ALB	SCR
12-DEMO-001	80.2	28.4	104	4.40	1.10
12-DEMO-002	71.7	37.3	106	4.33	0.979
All Studies	75.9	32.8	105	4.37	1.04

20 Save the table to file

- There is a output file attribute on the text that is returned
- When the `stable` output is passed to `stable_save()`, the attribute is used as the output file name

```
tab <- stable(data, output_file = "foo.tex")
str(tab)
```

```
##  'stable' chr [1:26] "{\\def\\arraystretch{1.4}\\tabcolsep=5pt" ...
##  - attr(*, "stable_file")= chr "foo.tex"
```

This can be used to save

```
stable_save(tab)

file.exists("foo.tex")
```

```
## [1] TRUE
```

21 Long table

- Long table is based on a call to `stable`
- The table header, tabular environemnt and table notes are reused

```
long <- ptdata()
long <- map_dfr(1:2, ~ long) %>% arrange(STUDY,DOSE,FORM)
```

```
long %>%
  stable_long(
    panel = "STUDY", cols_bold = TRUE,
    units = ys_get_unit(spec, parens = TRUE),
    notes = "The results look great!",
    clear_reps = "DOSE",
    cols_rename = c(Formulation  = "FORM"),
    r_file = "foo.R", output_file = "../deliv/table/output.tex",
    note_config = noteconf(type = "minipage", width = 0.8,table_skip = 0.2)
  ) %>% as.character() %>% writeLines
```

{

DOSE	Formulation	N	WT (kg)	CRCL (ml/min)	AGE (years)	ALB (g/dL)	SCR (mg/dL)
12-DEMO-001							
100 mg	tablet	80	71.4	104	33.7	4.20	1.06
	tablet	80	71.4	104	33.7	4.20	1.06
150 mg	capsule	16	89.4	122	24.4	4.63	1.12
	capsule	16	89.4	122	24.4	4.63	1.12
	tablet	48	81.7	104	34.4	3.83	0.910
	tablet	48	81.7	104	34.4	3.83	0.910
	troche	16	94.0	93.2	27.4	4.94	1.25
	troche	16	94.0	93.2	27.4	4.94	1.25
200 mg	tablet	64	67.9	100	27.5	4.25	1.10
	tablet	64	67.9	100	27.5	4.25	1.10
	troche	16	76.6	99.2	22.8	4.54	1.15
	troche	16	76.6	99.2	22.8	4.54	1.15
12-DEMO-002							
100 mg	capsule	36	61.3	113	38.3	4.04	1.28
	capsule	36	61.3	113	38.3	4.04	1.28
	tablet	324	77.6	106	29.9	4.31	0.981
	tablet	324	77.6	106	29.9	4.31	0.981
50 mg	capsule	36	74.1	112	37.1	4.44	0.900
	capsule	36	74.1	112	37.1	4.44	0.900
	tablet	324	71.2	106	34.1	4.63	0.868
	tablet	324	71.2	106	34.1	4.63	0.868
75 mg	capsule	36	72.4	105	38.2	3.89	0.900
	capsule	36	72.4	105	38.2	3.89	0.900
	tablet	288	71.6	98.9	34.2	4.49	0.991

continued on next page

DOSE	Formulation	N	WT (kg)	CRCL (ml/min)	AGE (years)	ALB (g/dL)	SCR (mg/dL)
	tablet	288	71.6	98.9	34.2	4.49	0.991
	troche	36	73.6	103	49.2	4.52	0.930
	troche	36	73.6	103	49.2	4.52	0.930

The results look great!
Source code: foo.R
Source file: output.tex

}

22 Fontsize

- Tables should be rendered with `\\normalsize` for the most part
- The font size can get bumped up or down in special circumstances

```
data %>% stable(sizes = tab_size(font = "tiny")) %>% pt_wrap(stdout())
```

STUDY	DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
12-DEMO-001	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
12-DEMO-001	150 mg	tablet	48	81.7	104	34.4	3.83	0.910
12-DEMO-001	150 mg	troche	16	94.0	93.2	27.4	4.94	1.25
12-DEMO-001	200 mg	tablet	64	67.9	100	27.5	4.25	1.10
12-DEMO-001	200 mg	troche	16	76.6	99.2	22.8	4.54	1.15
12-DEMO-002	100 mg	capsule	36	61.3	113	38.3	4.04	1.28
12-DEMO-002	100 mg	tablet	324	77.6	106	29.9	4.31	0.981
12-DEMO-002	50 mg	capsule	36	74.1	112	37.1	4.44	0.900
12-DEMO-002	50 mg	tablet	324	71.2	106	34.1	4.63	0.868
12-DEMO-002	75 mg	capsule	36	72.4	105	38.2	3.89	0.900
12-DEMO-002	75 mg	tablet	288	71.6	98.9	34.2	4.49	0.991
12-DEMO-002	75 mg	troche	36	73.6	103	49.2	4.52	0.930

23 Row space

- The default rowspacing is 1.4; this is a multiplication factor
- The user can bring this up or down so that row spacing of 1 is no extension or compression of row padding

```
data %>% slice(1:3) %>% stable() %>% pt_wrap(stdout())
```

STUDY	DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
12-DEMO-001	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
12-DEMO-001	150 mg	tablet	48	81.7	104	34.4	3.83	0.910

```
data %>% slice(1:3) %>% stable(sizes = tab_size(row = 0.9)) %>% pt_wrap(stdout())
```

STUDY	DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
12-DEMO-001	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
12-DEMO-001	150 mg	tablet	48	81.7	104	34.4	3.83	0.910

```
data %>% slice(1:3) %>% stable(sizes = tab_size(row = 2))   %>% pt_wrap(stdout())
```

STUDY	DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20	1.06
12-DEMO-001	150 mg	capsule	16	89.4	122	24.4	4.63	1.12
12-DEMO-001	150 mg	tablet	48	81.7	104	34.4	3.83	0.910

24 Col space

- The default is 5

```
data %>% stable(sizes = tab_size(col = 20)) %>% pt_wrap(stdout())
```

STUDY	DOSE	FORM	N	WT	CRCL	AGE	ALB
12-DEMO-001	100 mg	tablet	80	71.4	104	33.7	4.20
12-DEMO-001	150 mg	capsule	16	89.4	122	24.4	4.63
12-DEMO-001	150 mg	tablet	48	81.7	104	34.4	3.83
12-DEMO-001	150 mg	troche	16	94.0	93.2	27.4	4.94
12-DEMO-001	200 mg	tablet	64	67.9	100	27.5	4.25
12-DEMO-001	200 mg	troche	16	76.6	99.2	22.8	4.54
12-DEMO-002	100 mg	capsule	36	61.3	113	38.3	4.04
12-DEMO-002	100 mg	tablet	324	77.6	106	29.9	4.31
12-DEMO-002	50 mg	capsule	36	74.1	112	37.1	4.44
12-DEMO-002	50 mg	tablet	324	71.2	106	34.1	4.63
12-DEMO-002	75 mg	capsule	36	72.4	105	38.2	3.89
12-DEMO-002	75 mg	tablet	288	71.6	98.9	34.2	4.49
12-DEMO-002	75 mg	troche	36	73.6	103	49.2	4.52