Demo Doc - pipe interface

Contents

1	Data	3
2	Simple table	4
3	Annotate	5
4	Notes in minipage	6
5	Align	7
6	Units	8
7	Expand header rows	9
8	Math	10
9	hline from column	11
10	hline anywhere	12
11	hline pattern	13
12	hline multiple	14
13	Mark a summary row (cf sumrows)	15
14	Remove duplicate values	16
15	Add styling to data frame	17
16	Add styling in the pipeline	18
17	Panel	19
18	Colspan	20
19	Colspan - multiple	21
20	Colspan - from cols	22
21	Handle wide columns 21.1 descr is taking over the table	
22	Identify a summary row	24
23	Fontsize	25
24	Rowsnaco	26

25 Col space 27

1 Data

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

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

data <- pmt_summarized
head(data)</pre>
```

```
## # A tibble: 6 x 9
    STUDY
                      FORM
                              N
                                    WT
                                          CRCL AGE
                                                     ALB
                                                           SCR
##
    <chr>
                <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 Simple table

data %>% st_new() %>% stable(cols_bold = TRUE) %>% st_asis()

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

3 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 (encouraged)

```
data %>%
  st_data() %>%
  st_files(r = "foo.R", output = "foo.tex") %>%
  st_notes(
    "Data were analyzed in quadruplicate.",
    "The results are very clear."
) %>% stable() %>% st_asis()
```

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

Data were analyzed in quadruplicate.

The results are very clear.

Source code: foo.R Source file: foo.tex

4 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

```
data %>%
  st_new() %>%
  st_files("foo.R", "foo.tex") %>%
  st_noteconf(type = "minipage", width = 0.85) %>%
  st_notes(
    "Data were analyzed in quadruplicate.",
    "The results are very clear."
) %>% stable() %>% st_asis()
```

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

Data were analyzed in quadruplicate.

The results are very clear.

Source code: foo.R Source file: foo.tex

5 Align

- Center everything except for
- STUDY (left)
- DOSE and SCR (right)

```
data %>%
  st_new() %>%
  st_align("c", STUDY = 'l', .r = "DOSE,SCR") %>%
  stable() %>% st_asis()
```

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

6 Units

• Automatically put units under the column name

```
data %>%
  st_new() %>%
  st_center(STUDY = 'l', .r = "DOSE,SCR") %>%
  st_units(WT = "kg", SCR = "mg/dL", DOSE = "mg") %>%
  stable() %>% st_asis()
```

	DOSE			WT				SCR
STUDY	(mg)	FORM	N	(kg)	CRCL	AGE	ALB	(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

Alternatively

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

data[1:3,] %>%
   st_new() %>%
   st_center(STUDY = 'l', .r = "DOSE,SCR") %>%
   st_units(units) %>%
   stable() %>% st_asis()
```

STUDY	DOSE	FORM	N	WT (kg)	CRCL (ml/min)	AGE (years)		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

7 Expand header rows

- Multiline table header
- Unlimited number
- Use . . . to break

```
data %>%
  st_new() %>%
  st_rename("Study...Number" = STUDY, "Serum...Albumin" = ALB) %>%
  st_units(units) %>%
  stable() %>% st_asis()
```

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

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

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)	$ heta_3$	1.23	0.1
Unexplained variab	oility			
Additive_error	RUV	σ_1	0.02	0.01

9 hline from column

• Use the column to determine where the hline should go

```
st_new(data) %>%
st_hline(from = "STUDY") %>%
stable() %>% st_asis()
```

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

10 hline anywhere

• Give row numbers for hline

```
st_new(data) %>%
st_hline(at = c(3,nrow(data))-1) %>%
stable() %>% st_asis()
```

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 pattern

```
tmp <- readRDS("datasets/with-total.RDS")
st_new(tmp) %>%
st_hline(pattern = "all", cols = "STUDY", n = 2) %>%
stable() %>% st_asis()
```

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	75.9	32.8	105	4.37	1.04

12 hline multiple

```
tmp <- readRDS("datasets/with-total.RDS")
st_new(tmp) %>%
st_hline(at = 3, n = 2) %>%
stable() %>% st_asis()
```

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	75.9	32.8	105	4.37	1.04

13 Mark a summary row (cf sumrows)

```
tmp <- readRDS("datasets/with-total.RDS")

st_new(tmp) %>%
  st_hline(at = 3, n = 2) %>%
  st_bold(cols = "STUDY", pattern = "all") %>%
  st_edit(pattern = "all", replacement = "All studies") %>%
  stable() %>% st_asis()
```

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

14 Remove duplicate values

• Discard repeating values in a column

```
data %>%
  st_new() %>%
  st_hline(from = "STUDY") %>%
  st_clear_reps("STUDY") %>%
  stable() %>% st_asis()
```

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	0 mg capsule		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 Add styling to data frame

- tex_bold will make table cells bold when they match pattern
- $\bullet\ \ tex_it$ 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)))

tmp %>%
  st_new() %>%
  st_clear_reps(STUDY) %>%
  st_hline(from = "STUDY") %>%
  stable() %>% st_asis()
```

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

16 Add styling in the pipeline

```
tmp <- ptdata()

tmp %>%
    st_new() %>%
    st_clear_reps(STUDY, .now = TRUE) %>%
    st_hline(pattern = "\\S+", cols = "STUDY") %>%
    st_bold(cols = "STUDY") %>%
    st_it("DOSE") %>%
    st_edit("\\bmale", "dude") %>%
    st_edit("female", "gal") %>%
    stable() %>% st_asis()
```

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

17 Panel

- Divide the table using column contents
- there's a bug somewhere there

```
data %>%
  st_new() %>%
  st_center(DOSE = 'l', SCR = 'r') %>%
  st_panel("STUDY", prefix = "Study number: ") %>%
  stable() %>% st_asis()
```

DOSE	FORM	N	WT	CRCL	AGE	ALB	SCR
Study n	umber: 12	-DEM	O-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 ni	umber: 12	-DEM	O-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

18 Colspan

• Group columns

```
data %>%
  st_new() %>%
  st_left(.c = "WT,AGE,CRCL") %>%
  st_span("In final model", WT:CRCL) %>%
  stable() %>% st_asis()
```

				In fina	al 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
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

19 Colspan - multiple

- Multiple groupings
- Multiple levels

```
data %>%
  st_new() %>%
  st_span("Meh", DOSE:WT) %>%
  st_span("Hrm", AGE:CRCL) %>%
  st_span("Huh", ALB:SCR) %>%
  st_span("Expert opinion", CRCL:SCR, level = 2) %>%
  stable() %>% st_asis()
```

					E	expert o	pinio	1
		Meh				m	Н	uh
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

20 Colspan - from cols

• we have some columns of the form tag.name

```
dotdata <- readRDS("datasets/with-dots.RDS")</pre>
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
                                      4.20
                                                 78.5
                          104
                                                        26.0
                                                                  2.10
## 2 12-DEMO-001 81.7
                          104
                                      3.83
                                                 89.9
                                                        26.1
                                                                  1.92
dotdata %>%
 st_new() %>%
 st_span_split(sep = '.') %>%
 stable() %>% st_asis()
```

		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

21 Handle wide columns

21.1 descr is taking over the table

```
ptable <- readRDS("datasets/ptable.RDS")
ptable %>% st_new() %>% stable() %>% st_asis()
```

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

21.2 Limit descr to 5 cm

```
ptable %>%
  st_new() %>%
  st_align(descr = col_ragged(5)) %>%
  stable() %>% st_asis()
```

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

22 Identify a summary row

We can point to one or more rows and style it up as a "summary row"

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

23 Fontsize

• Where's my glasses?

data %>% st_new() %>% st_sizes(font = "tiny") %>% stable() %>% st_asis()

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

24 Row space

```
sl <- data %>% slice(1:3)
sl %>% st_new() %>% stable() %>% st_asis()
```

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

```
sl %>% st_new() %>% st_sizes(row = 0.9) %>% stable() %>% st_asis()
```

STUDY		FORM						
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

```
sl %>% st_new() %>% st_sizes(row = 2 ) %>% stable() %>% st_asis()
```

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

25 Col space

data %>% st_new() %>% st_sizes(col = 20) %>% stable() %>% st_asis()

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