

Bleeding Events with Enxoaparin in Moderate Renal Dysfunction

Detailed Results

Stephanie Kuhl, Brian Gulbis, Andrea C. Hall

March 24, 2016

```
source("0-library.R")

##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##
##   filter, lag

## The following objects are masked from 'package:base':
##
##   intersect, setdiff, setequal, union

##
## Attaching package: 'BGTools'

## The following object is masked from 'package:readr':
##
##   read_rds

library(pander)
panderOptions("table.split.table", Inf)
read_rds(analysis.dir)

## <environment: R_GlobalEnv>
```

Demographics

```
res <- result_table("table", analyze.demographics)

## Warning in data.row.names(row.names, rowsi, i): some row.names duplicated:
## 37,40 --> row.names NOT used

pander(res)
```

	moderate	normal	p	test
n	150	150		
sex = Male (%)	62 (41.3)	100 (66.7)	<0.001	
race (%)			0.005	
African American	50 (35.7)	26 (18.7)		
Asian	2 (1.4)	3 (2.2)		
Other	22 (15.7)	17 (12.2)		
White/Caucasian	66 (47.1)	93 (66.9)		
disposition (%)			0.152	
Acute Care	4 (2.7)	2 (1.3)		
Against Medical Advise	0 (0.0)	1 (0.7)		
DC/DISC TO REHAB	10 (6.7)	15 (10.0)		
DC/TF To Psych Hosp	1 (0.7)	0 (0.0)		
Deceased	5 (3.3)	1 (0.7)		
Discharged to Hospice-Home	4 (2.7)	1 (0.7)		
Discharged to	1 (0.7)	1 (0.7)		
Hospice-Medical Facility				
Home	46 (30.7)	61 (40.7)		
Home Care with Home	44 (29.3)	27 (18.0)		
Health				
Intermediate Care	0 (0.0)	1 (0.7)		
Long Term Care	7 (4.7)	9 (6.0)		
Skilled Nursing Facility	28 (18.7)	31 (20.7)		
visit.type (%)			0.248	
Inpatient	143 (95.3)	136 (90.7)		
Inpatient Rehab	6 (4.0)	8 (5.3)		
Inpatient Snf	1 (0.7)	5 (3.3)		
OBS Observation Patient	0 (0.0)	1 (0.7)		
facility (%)			0.214	
Memorial Hermann Hospital	143 (95.3)	137 (91.3)		
Memorial Hermann	6 (4.0)	8 (5.3)		
Rehabilitation Unit				
Memorial Hermann	1 (0.7)	5 (3.3)		
Transitional Care Facility				
afib = TRUE (%)	59 (39.3)	58 (38.7)	1.000	
dvt = TRUE (%)	79 (52.7)	66 (44.0)	0.166	
pe = TRUE (%)	37 (24.7)	57 (38.0)	0.018	
valve = TRUE (%)	24 (16.0)	22 (14.7)	0.873	
other = TRUE (%)	49 (32.7)	35 (23.3)	0.095	
age.gt60 = TRUE (%)	111 (74.0)	111 (74.0)	1.000	
vte = TRUE (%)	96 (64.0)	96 (64.0)	1.000	
n	150	150		
age (mean (sd))	68.25 (13.75)	63.42 (13.22)	0.002	
length.stay (mean (sd))	15.94 (16.87)	15.68 (14.38)	0.887	
n	150	150		
age (median [IQR])	70.00 [60.00, 78.00]	65.00 [60.00, 71.75]	0.001	nonnorm
length.stay (median [IQR])	12.62 [8.73, 17.64]	11.38 [7.34, 20.80]	0.517	nonnorm

Summary

```
result_table("cat", analyze.demographics)
```

```
## Warning in data.row.names(row.names, rowsi, i): some row.names duplicated:  
## 37,40 --> row.names NOT used
```

```
## group: moderate  
##      var    n miss p.miss  
##      sex 150    0    0.0  
##                                     level  
##                                     Female  
##                                     Male  
##  
##      race 150   10    6.7  
##                                     African American  
##                                     Asian  
##                                     Other  
##                                     White/Caucasian  
##  
## disposition 150    0    0.0  
##                                     Acute Care  
##                                     Against Medical Advise  
##                                     DC/DISC TO REHAB  
##                                     DC/TF To Psych Hosp  
##                                     Deceased  
##                                     Discharged to Hospice-Home  
##                                     Discharged to Hospice-Medical Facility  
##                                     Home  
##                                     Home Care with Home Health  
##                                     Intermediate Care  
##                                     Long Term Care  
##                                     Skilled Nursing Facility  
##  
## visit.type 150    0    0.0  
##                                     Inpatient  
##                                     Inpatient Rehab  
##                                     Inpatient Snf  
##                                     OBS Observation Patient  
##  
## facility 150    0    0.0  
##                                     Memorial Hermann Hospital  
##                                     Memorial Hermann Rehabilitation Unit  
##                                     Memorial Hermann Transitional Care Facility  
##  
##      afib 150    0    0.0  
##                                     FALSE  
##                                     TRUE  
##  
##      dvt 150    0    0.0  
##                                     FALSE  
##                                     TRUE  
##  
##      pe 150    0    0.0  
##                                     FALSE  
##                                     TRUE  
##  
##      valve 150    0    0.0  
##                                     FALSE  
##                                     TRUE  
##  
##      other 150    0    0.0  
##                                     FALSE
```

##					TRUE
##					
##	age.gt60	150	0	0.0	FALSE
##					TRUE
##					
##	vte	150	0	0.0	FALSE
##					TRUE
##					
##	freq	percent	cum.percent		
##	88	58.7	58.7		
##	62	41.3	100.0		
##					
##	50	35.7	35.7		
##	2	1.4	37.1		
##	22	15.7	52.9		
##	66	47.1	100.0		
##					
##	4	2.7	2.7		
##	0	0.0	2.7		
##	10	6.7	9.3		
##	1	0.7	10.0		
##	5	3.3	13.3		
##	4	2.7	16.0		
##	1	0.7	16.7		
##	46	30.7	47.3		
##	44	29.3	76.7		
##	0	0.0	76.7		
##	7	4.7	81.3		
##	28	18.7	100.0		
##					
##	143	95.3	95.3		
##	6	4.0	99.3		
##	1	0.7	100.0		
##	0	0.0	100.0		
##					
##	143	95.3	95.3		
##	6	4.0	99.3		
##	1	0.7	100.0		
##					
##	91	60.7	60.7		
##	59	39.3	100.0		
##					
##	71	47.3	47.3		
##	79	52.7	100.0		
##					
##	113	75.3	75.3		
##	37	24.7	100.0		
##					
##	126	84.0	84.0		
##	24	16.0	100.0		
##					
##	101	67.3	67.3		
##	49	32.7	100.0		
##					

```

##      39      26.0      26.0
##     111      74.0     100.0
##
##      54      36.0      36.0
##      96      64.0     100.0
##
## -----
## group: normal
##      var    n miss p.miss                                level
##      sex 150    0   0.0                                Female
##                                                    Male
##
##      race 150   11   7.3                                African American
##                                                    Asian
##                                                    Other
##                                                    White/Caucasian
##
## disposition 150    0   0.0                                Acute Care
##                                                    Against Medical Advise
##                                                    DC/DISC TO REHAB
##                                                    DC/TF To Psych Hosp
##                                                    Deceased
##                                                    Discharged to Hospice-Home
##                                                    Discharged to Hospice-Medical Facility
##                                                    Home
##                                                    Home Care with Home Health
##                                                    Intermediate Care
##                                                    Long Term Care
##                                                    Skilled Nursing Facility
##
## visit.type 150    0   0.0                                Inpatient
##                                                    Inpatient Rehab
##                                                    Inpatient Snf
##                                                    OBS Observation Patient
##
## facility 150    0   0.0                                Memorial Hermann Hospital
##                                                    Memorial Hermann Rehabilitation Unit
##                                                    Memorial Hermann Transitional Care Facility
##
##      afib 150    0   0.0                                FALSE
##                                                    TRUE
##
##      dvt 150    0   0.0                                FALSE
##                                                    TRUE
##
##      pe 150    0   0.0                                FALSE
##                                                    TRUE
##
##      valve 150    0   0.0                                FALSE
##                                                    TRUE
##
##      other 150    0   0.0                                FALSE
##                                                    TRUE
##

```

```

##      age.gt60 150      0      0.0      FALSE
##                                     TRUE
##
##      vte 150      0      0.0      FALSE
##                                     TRUE
##
## freq percent cum.percent
##   50    33.3      33.3
##  100    66.7     100.0
##
##   26    18.7      18.7
##    3     2.2      20.9
##   17    12.2      33.1
##   93    66.9     100.0
##
##    2     1.3       1.3
##    1     0.7       2.0
##   15    10.0      12.0
##    0     0.0      12.0
##    1     0.7      12.7
##    1     0.7      13.3
##    1     0.7      14.0
##   61    40.7      54.7
##   27    18.0      72.7
##    1     0.7      73.3
##    9     6.0      79.3
##   31    20.7     100.0
##
##  136    90.7      90.7
##    8     5.3      96.0
##    5     3.3      99.3
##    1     0.7     100.0
##
##  137    91.3      91.3
##    8     5.3      96.7
##    5     3.3     100.0
##
##   92    61.3      61.3
##   58    38.7     100.0
##
##   84    56.0      56.0
##   66    44.0     100.0
##
##   93    62.0      62.0
##   57    38.0     100.0
##
##  128    85.3      85.3
##   22    14.7     100.0
##
##  115    76.7      76.7
##   35    23.3     100.0
##
##   39    26.0      26.0
##  111    74.0     100.0

```

```
##
##      54      36.0      36.0
##      96      64.0     100.0
##
##
## p-values
##                pApprox      pExact
## sex          1.818129e-05 1.648641e-05
## race          4.633446e-03 3.072003e-03
## disposition 1.522785e-01      NA
## visit.type    2.479692e-01 2.180147e-01
## facility      2.142790e-01 2.350539e-01
## afib          1.000000e+00 1.000000e+00
## dvt           1.656214e-01 1.655152e-01
## pe            1.803390e-02 1.779104e-02
## valve         8.726938e-01 8.728609e-01
## other         9.459935e-02 9.427938e-02
## age.gt60      1.000000e+00 1.000000e+00
## vte           1.000000e+00 1.000000e+00
##
## Standardize mean differences
##                1 vs 2
## sex          0.52555214
## race          0.44226730
## disposition 0.47013675
## visit.type    0.23623723
## facility      0.20372928
## afib          0.01366853
## dvt           0.17408546
## pe            0.29046581
## valve         0.03701166
## other         0.20900179
## age.gt60      0.00000000
## vte           0.00000000
```

```
result_table("cont", analyze.demographics)
```

```
## Warning in data.row.names(row.names, row_si, i): some row.names duplicated:
## 37,40 --> row.names NOT used
```

```
## group: moderate
##                n miss p.miss mean sd median  p25 p75  min max  skew kurt
## age           150   0      0   68 14      70 60.0  78 24.0  93 -0.79  0.65
## length.stay  150   0      0   16 17      13  8.7  18  2.4 146  5.63 38.81
## -----
## group: normal
##                n miss p.miss mean sd median  p25 p75  min max  skew kurt
## age           150   0      0   63 13      65 60.0  72 20.0  87 -1.3  2.1
## length.stay  150   0      0   16 14      11  7.3  21  3.2 136  4.4 32.4
##
## p-values
##                pNormal  pNonNormal
## age           0.002121191 0.001307973
```

```
## length.stay 0.886973359 0.516817450
##
## Standardize mean differences
##          1 vs 2
## age      0.35794000
## length.stay 0.01642639
```

Past Medical History

```
res <- result_table("table", analyze.diagnosis)
```

```
## NULL
## NULL
```

```
pander(res)
```

	moderate	normal	p	test
n	150	150		
bleed.cns = TRUE (%)	1 (0.7)	0 (0.0)	1.000	
bleed.gi = TRUE (%)	7 (4.7)	2 (1.3)	0.176	
bleed.major = TRUE (%)	2 (1.3)	0 (0.0)	0.478	
bleed.minor = TRUE (%)	7 (4.7)	2 (1.3)	0.176	
cad = TRUE (%)	57 (38.0)	43 (28.7)	0.111	
ckd_12 = TRUE (%)	5 (3.3)	1 (0.7)	0.216	
ckd_3 = TRUE (%)	17 (11.3)	4 (2.7)	0.007	
ckd_45 = TRUE (%)	14 (9.3)	3 (2.0)	0.013	
diabetes = TRUE (%)	61 (40.7)	46 (30.7)	0.092	
esrd = TRUE (%)	2 (1.3)	1 (0.7)	1.000	
heart.failure = TRUE (%)	54 (36.0)	42 (28.0)	0.173	
hyperlipid = TRUE (%)	57 (38.0)	56 (37.3)	1.000	
hypertension = TRUE (%)	125 (83.3)	113 (75.3)	0.117	
stroke = TRUE (%)	5 (3.3)	3 (2.0)	0.720	
tia = FALSE (%)	150 (100.0)	150 (100.0)	NA	

Home Medication

```
res <- result_table("table", analyze.home.meds)
```

```
## NULL
## NULL
```

```
pander(res)
```

	moderate	normal	p	test
n	150	150		

	moderate	normal	p	test
anticoagulants = TRUE (%)	60 (40.0)	42 (28.0)	0.038	
antiplatelet.agents = TRUE (%)	24 (16.0)	24 (16.0)	1.000	

Bleeding Events

```
cram <- c("drop.after.procedure", "prbc.after.procedure", "prbc.after.drop")
res <- result_table("table", analyze.bleed, cram = cram)
```

```
## NULL
## NULL
```

```
pander(res)
```

	moderate	normal	p	test
n	150	150		
hgb.drop = TRUE (%)	13 (9.0)	7 (5.2)	0.328	
prbc = TRUE (%)	21 (14.5)	15 (11.2)	0.522	
ct.bleed = TRUE (%)	6 (4.1)	5 (3.7)	1.000	
ct.major = TRUE (%)	0 (0.0)	2 (1.5)	0.444	
proc = TRUE (%)	45 (31.0)	32 (23.9)	0.230	
major.bleed = TRUE (%)	2 (1.4)	2 (1.5)	1.000	
minor.bleed = TRUE (%)	12 (8.3)	5 (3.7)	0.182	
major.bleed.proc = TRUE (%)	1 (0.7)	0 (0.0)	1.000	
minor.bleed.proc = TRUE (%)	3 (2.1)	1 (0.7)	0.671	
drop.after.procedure = FALSE/TRUE (%)	5/3 (62.5/37.5)	2/1 (66.7/33.3)	1.000	
prbc.after.procedure = FALSE/TRUE (%)	5/6 (45.5/54.5)	0/6 (0.0/100.0)	0.159	
prbc.after.drop = FALSE/TRUE (%)	3/1 (75.0/25.0)	2/1 (66.7/33.3)	1.000	

New Thrombosis

```
cram <- c("stroke.new", "pe.new")
res <- result_table("table", analyze.thrombosis, cram = cram)
```

```
## NULL
## NULL
```

```
pander(res)
```

	moderate	normal	p	test
n	150	150		

	moderate	normal	p	test
thrombus = TRUE (%)	7 (4.7)	6 (4.0)	1.000	
stroke.new = FALSE/TRUE (%)	5/2 (71.4/28.6)	5/1 (83.3/16.7)	1.000	
pe.new = FALSE/TRUE (%)	6/1 (85.7/14.3)	4/2 (66.7/33.3)	0.879	