

## Descriptive Stats

```
for(name in colnames(clinical_data_0)){
  setnames(clinical_data_0, name, gsub(" ", " ", name, fixed=TRUE))
}
setnames(clinical_data_0, "6Y. Static Major Curve Cobb Angle", "6Y. Static Major curve Cobb angle")

years_rad <- sapply(c("6W.", "2Y.", "3Y.", "5Y.", "6Y."), function(x) paste(x, vars$radiology), simplify=FALSE)
years_quality <- sapply(c("6M.", "2Y.", "3Y.", "5Y.", "6Y."), function(x) paste(x, vars$quality), simplify=FALSE)
quality_first <- paste(vars$quality, "_First Visit", sep="")

all_vars <- c(
  unlist(vars[c("demographics", "radiology", "surgery")]) %>% unique,
  '2 YEAR VISIT - Date of visit',
  '3 YEAR VISIT - Date of visit',
  '5 YEAR VISIT - Date of visit',
  '6 YEAR VISIT - Date of visit',
  'Code of the patient',
  'st1. Date of Stage',
  years_rad,
  years_quality,
  quality_first
)

clinical_data <- rbind(
  clinical_data_0[, .SD, .SDcols=all_vars][, type:='non-depuy'],
  clinical_data_1[, .SD, .SDcols=all_vars][, type:='depuy']
)

clinical_data[, `ASA classification` := as.character(`ASA classification`)]
```

## Filters

```
discarded_patients <- readLines('five_years/discarded_patients')

clinical_data %<>%
  .[, followup_2y :=
    !is.na(`2 YEAR VISIT - Date of visit`) |
    !is.na(`3 YEAR VISIT - Date of visit`)] %>%
  .[, followup_5y :=
    !is.na(`5 YEAR VISIT - Date of visit`) |
    !is.na(`6 YEAR VISIT - Date of visit`)]
```

- Number of Patients

```
clinical_data[, .(total=`Code of the patient` %>% uniqueN), type]
```

```

      type total
1: non-depuy   708
2:    depuy    607

```

- Number of patients with visit in 2 years

```
clinical_data[followup_2y==TRUE, .(total=`Code of the patient` %>% uniqueN), type]
```

```

      type total
1: non-depuy   465
2:    depuy    434

```

- Number of patients with visit in 5 years

```
clinical_data[followup_5y==TRUE, .(total=`Code of the patient` %>% uniqueN), type]
```

```

      type total
1: non-depuy   220
2:    depuy    224

```

```

clinical_data %<>%
  .[followup_2y==TRUE] %>%
  .[`st1. Date of Stage` %>% as.Date() < as.Date('2016-6-1')]

```

Total Patients for the analysis

```
clinical_data[, .(total=`Code of the patient` %>% uniqueN), type]
```

```

      type total
1: non-depuy   226
2:    depuy    260

```

## Demographics

Age

```

[1] "stats"
      type    mean      sd    N
1: non-depuy 58.72817 19.44153 226
2:    depuy 56.01154 18.35146 260
[1] "p_val"
[1] 0.1154856

```

Gender

```
[1] "table_depuy"
```

```
Female    Male
```

```
      204      56
[1] "proportion_depu"

```

```
      Female      Male
0.7846154 0.2153846
[1] "table_nondepu"

```

```
Female      Male
      178      48
[1] "proportion_nondepu"

```

```
      Female      Male
0.7876106 0.2123894
[1] "p_val_Male"
[1] 1
[1] "p_val_Female"
[1] 1

```

```
Prior Spine Surgery
[1] "table_depu"

```

```
      No      Yes
169      91
[1] "proportion_depu"

```

```
      No      Yes
0.65 0.35
[1] "table_nondepu"

```

```
      No      Yes
162      64
[1] "proportion_nondepu"

```

```
      No      Yes
0.7168142 0.2831858
[1] "p_val_No"
[1] 0.1392032
[1] "p_val_Yes"
[1] 0.1392032

```

```
Height (cm)_First Visit
[1] "stats"
      type      mean      sd      N
1: non-depu 162.7679 9.691642 224
2:      depu 162.8301 9.095643 259
[1] "p_val"
[1] 0.9422866

```

```
Weight (kgs)_First Visit
[1] "stats"
      type      mean      sd      N

```

```

1: non-depuy 65.44420 13.08305 224
2:      depuy 66.53462 12.69948 260
[1] "p_val"
[1] 0.3545402

```

BMI\_First Visit

```

[1] "stats"
      type      mean      sd    N
1: non-depuy 24.70183 4.420484 224
2:      depuy 25.09981 4.563928 259
[1] "p_val"
[1] 0.3315682

```

ASA classification

```

[1] "table_depuy"

```

```

      1      2      3
59 142  59
[1] "proportion_depuy"

```

```

      1      2      3
0.2269231 0.5461538 0.2269231
[1] "table_nondepuy"

```

```

      1      2      3
88 120  17
[1] "proportion_nondepuy"

```

```

      1      2      3
0.39111111 0.53333333 0.07555556
[1] "p_val_1"
[1] 0.0001506339
[1] "p_val_2"
[1] 0.8075102
[1] "p_val_3"
[1] 7.920317e-06
[1] "p_val_NA"
[1] NaN

```

Tobacco use\_First Visit

```

[1] "table_depuy"

```

|                                       |                                     |
|---------------------------------------|-------------------------------------|
| Current User: 1 pack per day          | Current User: 2 packs per day       |
| 16                                    | 1                                   |
| Current User: 3 packs or more per day | Current User: Less than 1pk per day |
| 3                                     | 40                                  |
| Ex-User: 0-6 months                   | Ex-User: 1 year or greater          |
| 5                                     | 2                                   |
| Ex-User: 2 yrs or greater             | Ex-User: 6-12 months                |
| 28                                    | 2                                   |
| Non-User                              |                                     |

[1] "proportion\_depuv"

|                                       |                                     |
|---------------------------------------|-------------------------------------|
| Current User: 1 pack per day          | Current User: 2 packs per day       |
| 0.061538462                           | 0.003846154                         |
| Current User: 3 packs or more per day | Current User: Less than 1pk per day |
| 0.011538462                           | 0.153846154                         |
| Ex-User: 0-6 months                   | Ex-User: 1 year or greater          |
| 0.019230769                           | 0.007692308                         |
| Ex-User: 2 yrs or greater             | Ex-User: 6-12 months                |
| 0.107692308                           | 0.007692308                         |
| Non-User                              |                                     |
| 0.626923077                           |                                     |

[1] "table\_nondepuv"

|                              |                                     |
|------------------------------|-------------------------------------|
| Current User: 1 pack per day | Current User: Less than 1pk per day |
| 7                            | 25                                  |
| Ex-User: 0-6 months          | Ex-User: 1 year or greater          |
| 8                            | 1                                   |
| Ex-User: 2 yrs or greater    | Ex-User: 6-12 months                |
| 38                           | 2                                   |
| Non-User                     |                                     |
| 145                          |                                     |

[1] "proportion\_nondepuv"

|                              |                                     |
|------------------------------|-------------------------------------|
| Current User: 1 pack per day | Current User: Less than 1pk per day |
| 0.030973451                  | 0.110619469                         |
| Ex-User: 0-6 months          | Ex-User: 1 year or greater          |
| 0.035398230                  | 0.004424779                         |
| Ex-User: 2 yrs or greater    | Ex-User: 6-12 months                |
| 0.168141593                  | 0.008849558                         |
| Non-User                     |                                     |
| 0.641592920                  |                                     |

[1] "p\_val\_Non-User"

[1] 0.8099996

[1] "p\_val\_Current User: Less than 1pk per day"

[1] 0.2066549

[1] "p\_val\_Ex-User: 2 yrs or greater"

[1] 0.07068495

[1] "p\_val\_Current User: 1 pack per day"

[1] 0.1711069

[1] "p\_val\_Ex-User: 6-12 months"

[1] 1

[1] "p\_val\_Ex-User: 0-6 months"

[1] 0.412237

[1] "p\_val\_Ex-User: 1 year or greater"

[1] 1

[1] "p\_val\_Current User: 2 packs per day"

[1] 1

[1] "p\_val\_Current User: 3 packs or more per day"

[1] 0.2986748

ESSG Diagnosis

[1] "table\_deputy"

|                |                             |
|----------------|-----------------------------|
| Congenital     | Degenerative                |
| 7              | 114                         |
| Failed-back    | Idiopathic                  |
| 18             | 95                          |
| Neuromuscular  | Other: radiotherapy induced |
| 5              | 1                           |
| Post-traumatic | Scheuermann                 |
| 7              | 9                           |
| Syndromic      |                             |
| 4              |                             |

[1] "proportion\_deputy"

|                |                             |
|----------------|-----------------------------|
| Congenital     | Degenerative                |
| 0.026923077    | 0.438461538                 |
| Failed-back    | Idiopathic                  |
| 0.069230769    | 0.365384615                 |
| Neuromuscular  | Other: radiotherapy induced |
| 0.019230769    | 0.003846154                 |
| Post-traumatic | Scheuermann                 |
| 0.026923077    | 0.034615385                 |
| Syndromic      |                             |
| 0.015384615    |                             |

[1] "table\_nondeputy"

|                |               |                          |
|----------------|---------------|--------------------------|
| Congenital     | Degenerative  | Failed-back              |
| 7              | 62            | 7                        |
| Idiopathic     | Neuromuscular | Other: spondylolisthesis |
| 122            | 1             | 1                        |
| Post-traumatic | Scheuermann   |                          |
| 12             | 14            |                          |

[1] "proportion\_nondeputy"

|                |               |                          |
|----------------|---------------|--------------------------|
| Congenital     | Degenerative  | Failed-back              |
| 0.030973451    | 0.274336283   | 0.030973451              |
| Idiopathic     | Neuromuscular | Other: spondylolisthesis |
| 0.539823009    | 0.004424779   | 0.004424779              |
| Post-traumatic | Scheuermann   |                          |
| 0.053097345    | 0.061946903   |                          |

[1] "p\_val\_Idiopathic"

[1] 0.0001653386

[1] "p\_val\_Degenerative"

[1] 0.0002519414

[1] "p\_val\_Scheuermann"

[1] 0.22967

[1] "p\_val\_Failed-back"

[1] 0.0894093

[1] "p\_val\_Post-traumatic"

[1] 0.2111926

[1] "p\_val\_Other: spondylolisthesis"

[1] 0.9440321

[1] "p\_val\_Neuromuscular"

[1] 0.287987

```

[1] "p_val_Congenital"
[1] 1
[1] "p_val_Other: radiotherapy induced"
[1] 1
[1] "p_val_Syndromic"
[1] 0.1709779

```

#### Surgical Approach

```
[1] "table_depuy"
```

| Anterior-Posterior | Posterior | Posterior-Anterior |
|--------------------|-----------|--------------------|
| 5                  | 250       | 5                  |

```
[1] "proportion_depuy"
```

| Anterior-Posterior | Posterior  | Posterior-Anterior |
|--------------------|------------|--------------------|
| 0.01923077         | 0.96153846 | 0.01923077         |

```
[1] "table_nondepuy"
```

```
< table of extent 0 >
```

```
[1] "proportion_nondepuy"
```

```
numeric(0)
```

```
[1] "p_val_NA"
```

```
[1] NaN
```

```
[1] "p_val_Posterior"
```

```
[1] 1.724689e-98
```

```
[1] "p_val_Anterior-Posterior"
```

```
[1] 0.09998745
```

```
[1] "p_val_Posterior-Anterior"
```

```
[1] 0.09998745
```

#### Radiology

Static Major curve Cobb angle

```
[1] "stats"
```

|    | type      | mean     | sd       | N   |
|----|-----------|----------|----------|-----|
| 1: | non-depuy | 45.93621 | 23.71404 | 219 |
| 2: | depuy     | 42.39179 | 20.56321 | 246 |

```
[1] "p_val"
```

```
[1] 0.08762569
```

6W. Static Major curve Cobb angle

```
[1] "stats"
```

|    | type      | mean     | sd       | N   |
|----|-----------|----------|----------|-----|
| 1: | non-depuy | 22.54969 | 17.54126 | 130 |
| 2: | depuy     | 22.12236 | 14.49691 | 220 |

```
[1] "p_val"
```

```
[1] 0.814842
```

6W. Static Major curve Cobb angle\_gain

```
[1] "stats"
```

|  | type | mean | sd | N |
|--|------|------|----|---|
|--|------|------|----|---|

```

1: non-depuy -19.69623 13.86465 130
2:      depuy -20.84132 15.39504 219
[1] "p_val"
[1] 0.4748333

```

```

2Y. Static Major curve Cobb angle
[1] "stats"
      type      mean      sd    N
1: non-depuy 23.71316 17.97096 136
2:      depuy 24.25100 17.65441 201
[1] "p_val"
[1] 0.7862305

```

```

2Y. Static Major curve Cobb angle_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy -22.85074 15.97146 136
2:      depuy -18.94709 15.23779 196
[1] "p_val"
[1] 0.02643779

```

```

5Y. Static Major curve Cobb angle
[1] "stats"
      type      mean      sd    N
1: non-depuy 25.02853 16.59048  68
2:      depuy 21.69740 17.21689 104
[1] "p_val"
[1] 0.2066835

```

```

5Y. Static Major curve Cobb angle_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy -26.56059 14.37802  68
2:      depuy -21.10469 15.87151  98
[1] "p_val"
[1] 0.02260712

```

```

Static Major curve Cobb angle tests
preop vs 6w p-value
1.403218e-52
6w vs 2y p-value
0.2911732

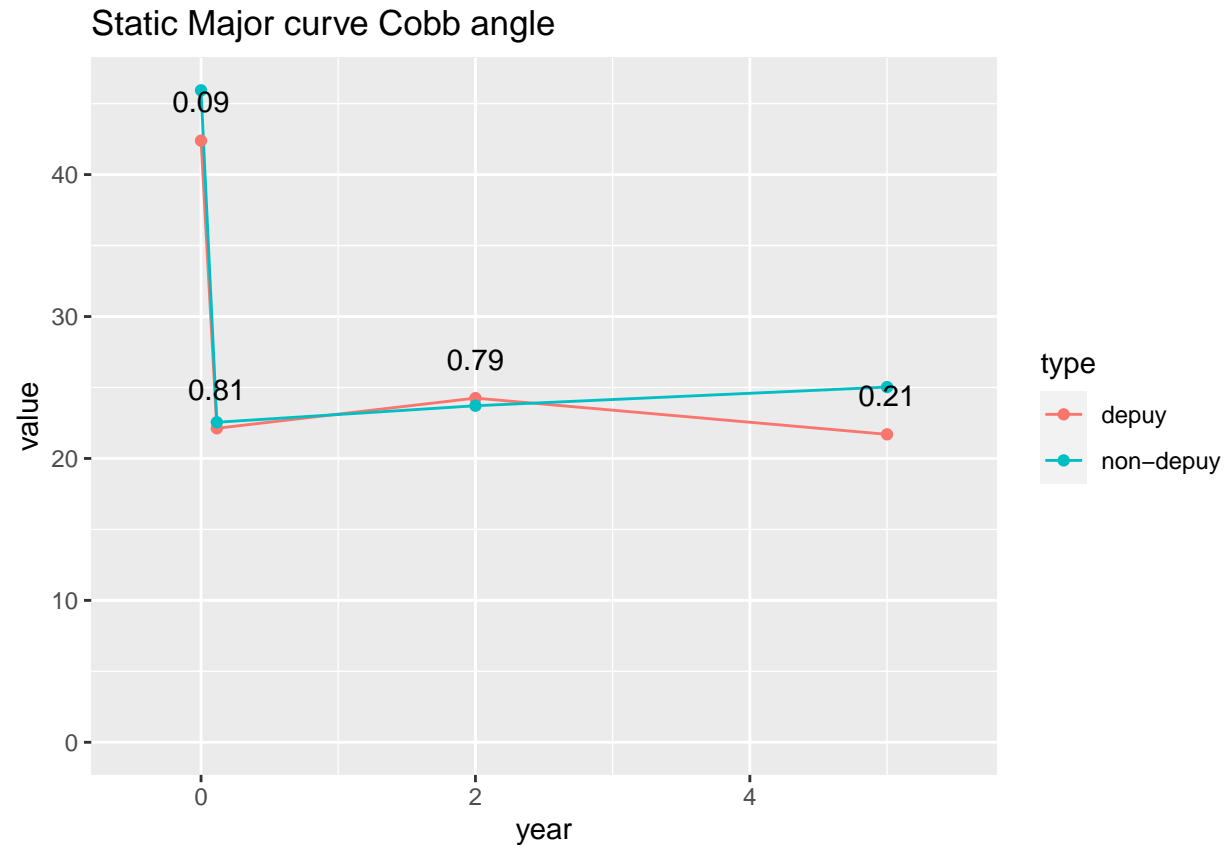
```

```

6w vs 5y p-value
0.3963831
2y vs 5y p-value
0.9945991

```





Coronal Balance (C7PL to CSVL)

```
[1] "stats"
      type      mean      sd    N
1: non-depuy -1.722344 32.37762 192
2:      depuy 22.333621 20.32074 232
[1] "p_val"
[1] 3.629108e-17
```

6W. Coronal Balance (C7PL to CSVL)

```
[1] "stats"
      type      mean      sd    N
1: non-depuy -3.219508 23.28550 183
2:      depuy 21.008520 17.20664 196
[1] "p_val"
[1] 7.581305e-26
```

6W. Coronal Balance (C7PL to CSVL)\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy -1.285325 31.50908 169
2:      depuy -3.369375 23.98218 176
[1] "p_val"
[1] 0.491178
```

```

2Y. Coronal Balance (C7PL to CSVL)
[1] "stats"
      type      mean      sd    N
1: non-depuy  0.6191005 22.41306 189
2:      depuy 19.2775532 15.60513 188
[1] "p_val"
[1] 9.840316e-19

```

```

2Y. Coronal Balance (C7PL to CSVL)_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy  1.050424 34.86617 165
2:      depuy -4.987879 23.44812 165
[1] "p_val"
[1] 0.065924

```

```

5Y. Coronal Balance (C7PL to CSVL)
[1] "stats"
      type      mean      sd    N
1: non-depuy  2.564819 25.75562  83
2:      depuy 18.357000 15.70068 100
[1] "p_val"
[1] 3.001608e-06

```

```

5Y. Coronal Balance (C7PL to CSVL)_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy  5.543939 36.33469  66
2:      depuy -4.055667 20.05347  90
[1] "p_val"
[1] 0.05531421

```

```

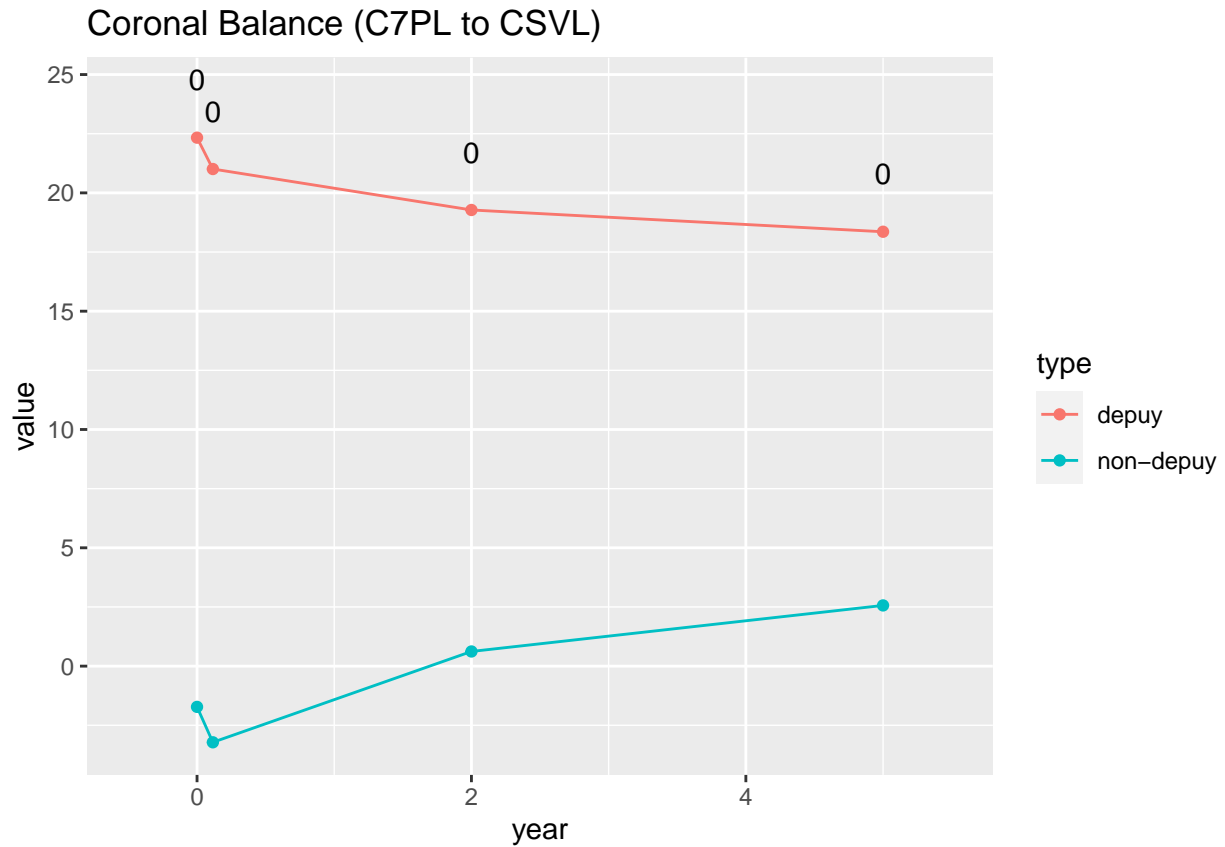
Coronal Balance (C7PL to CSVL) tests
preop vs 6w p-value
0.252907
6w vs 2y p-value
0.6837636

```

```

6w vs 5y p-value
0.3742707
2y vs 5y p-value
0.5579464

```



#### Sagittal Balance

```
[1] "stats"
      type    mean      sd    N
1: non-depuy 36.95420 61.37315 193
2:      depuy 49.05664 61.89167 250
[1] "p_val"
[1] 0.04095191
```

#### 6W. Sagittal Balance

```
[1] "stats"
      type    mean      sd    N
1: non-depuy 17.10087 39.46367 183
2:      depuy 25.85922 41.20393 204
[1] "p_val"
[1] 0.0334157
```

#### 6W. Sagittal Balance\_gain

```
[1] "stats"
      type    mean      sd    N
1: non-depuy -17.96663 50.50322 172
2:      depuy -22.25015 52.83688 195
[1] "p_val"
[1] 0.4280389
```

```

2Y. Sagittal Balance
[1] "stats"
      type      mean      sd    N
1: non-depuy 22.60079 47.86796 190
2:      depuy 32.48812 49.11368 191
[1] "p_val"
[1] 0.04732146

```

```

2Y. Sagittal Balance_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy -16.94606 46.72972 165
2:      depuy -20.27159 56.44687 182
[1] "p_val"
[1] 0.5490417

```

```

5Y. Sagittal Balance
[1] "stats"
      type      mean      sd    N
1: non-depuy 26.67512 52.27813  82
2:      depuy 37.89808 49.52207  99
[1] "p_val"
[1] 0.1427835

```

```

5Y. Sagittal Balance_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy  8.165373 50.83670  67
2:      depuy -15.161720 56.44503  93
[1] "p_val"
[1] 0.007021358

```

```

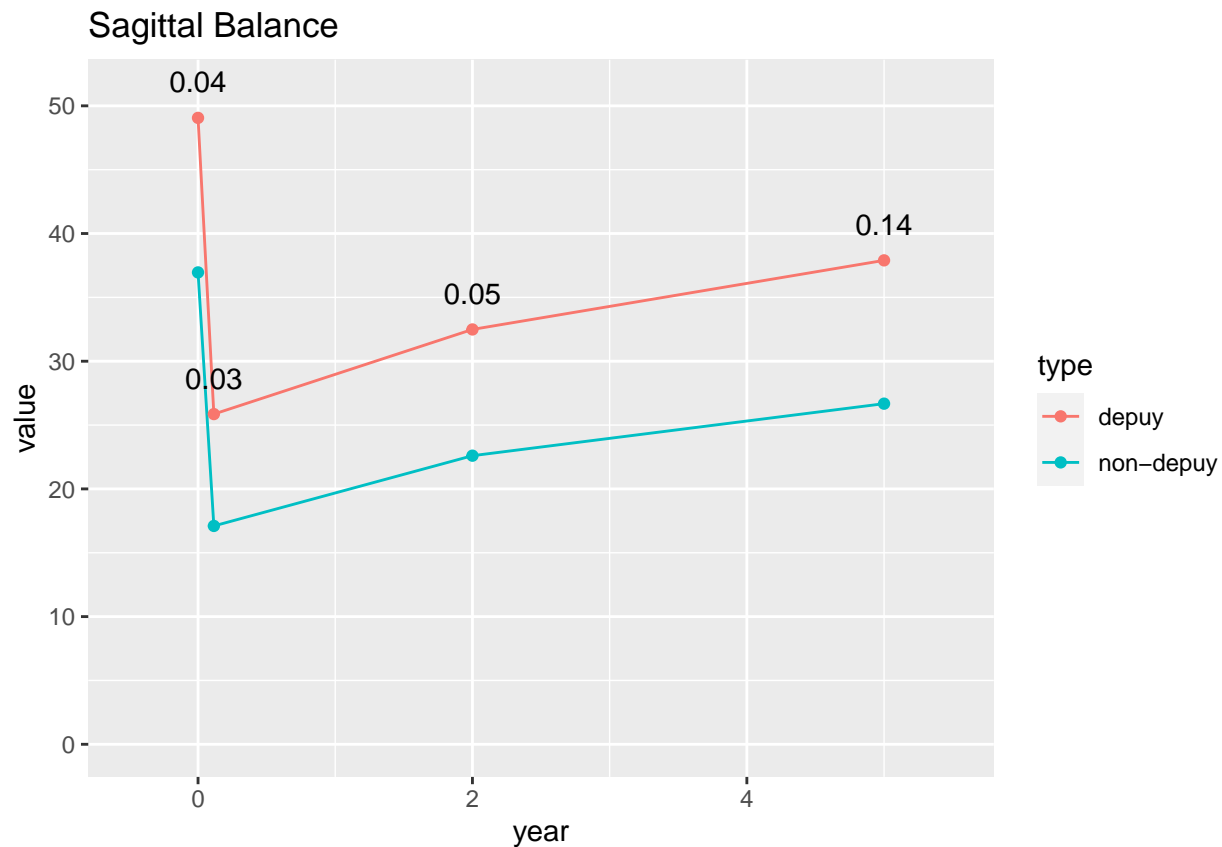
Sagittal Balance tests
preop vs 6w p-value
1.291629e-09
6w vs 2y p-value
0.1589919

```

```

6w vs 5y p-value
0.03878734
2y vs 5y p-value
0.3460191

```



Sagittal T2-T5

```
[1] "stats"
      type    mean      sd    N
1: non-depuy 11.11271  8.893395 210
2:      depuy 12.73878 10.346019 254
[1] "p_val"
[1] 0.06937376
```

6W. Sagittal T2-T5

```
[1] "stats"
      type    mean      sd    N
1: non-depuy 14.57833  8.739755 204
2:      depuy 14.31248  9.250246 214
[1] "p_val"
[1] 0.7627006
```

6W. Sagittal T2-T5\_gain

```
[1] "stats"
      type    mean      sd    N
1: non-depuy 3.718802  9.226323 192
2:      depuy 1.925167 10.870688 209
[1] "p_val"
[1] 0.07489301
```

```

2Y. Sagittal T2-T5
[1] "stats"
      type      mean      sd      N
1: non-depuy 16.1896 10.110321 202
2:      depuy 14.6668  9.990839 197
[1] "p_val"
[1] 0.131022

```

```

2Y. Sagittal T2-T5_gain
[1] "stats"
      type      mean      sd      N
1: non-depuy 5.255132 11.18878 189
2:      depuy 1.962604 10.36023 192
[1] "p_val"
[1] 0.003077781

```

```

5Y. Sagittal T2-T5
[1] "stats"
      type      mean      sd      N
1: non-depuy 16.35898 11.31364  88
2:      depuy 15.04920 10.98006 100
[1] "p_val"
[1] 0.4229941

```

```

5Y. Sagittal T2-T5_gain
[1] "stats"
      type      mean      sd      N
1: non-depuy 5.726747 11.43464  83
2:      depuy 5.010918 11.63862  98
[1] "p_val"
[1] 0.6777438

```

```

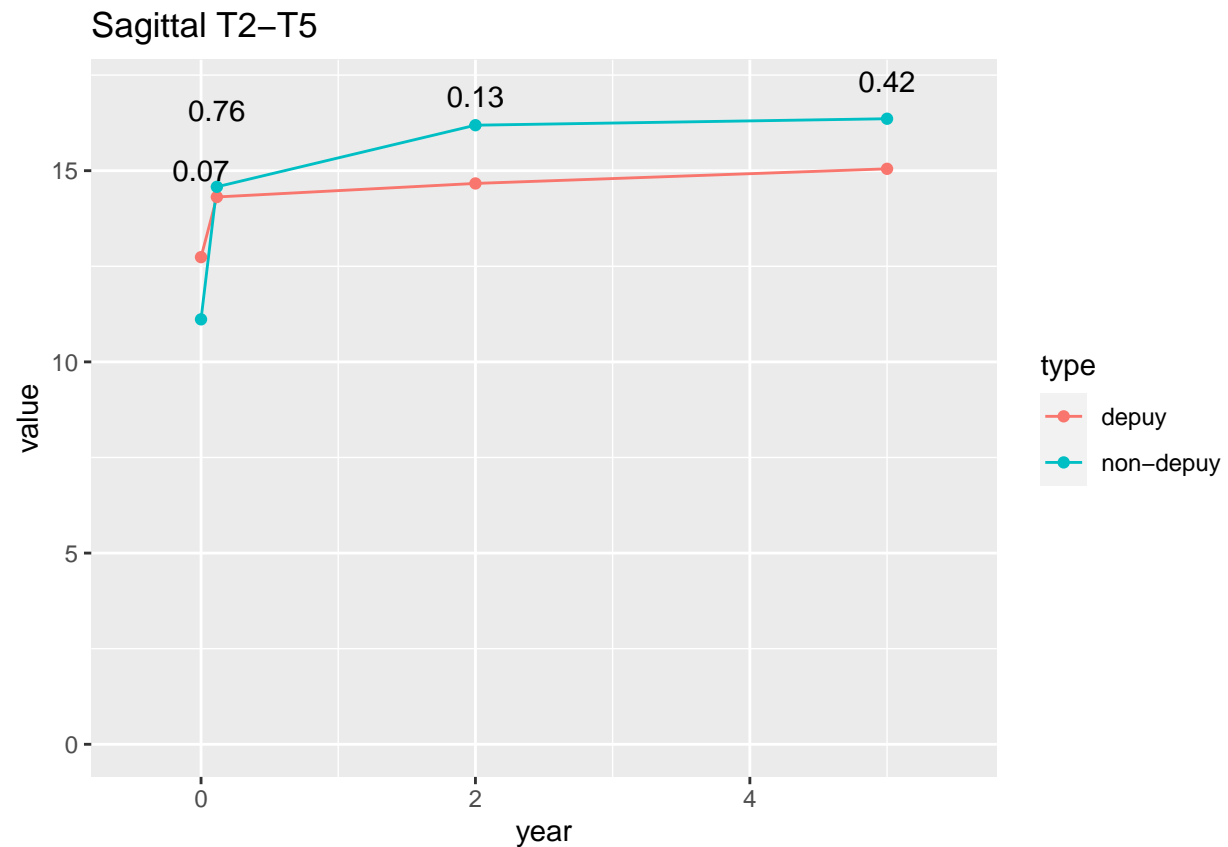
Sagittal T2-T5 tests
preop vs 6w p-value
0.0001184078
6w vs 2y p-value
0.09246131

```

```

6w vs 5y p-value
0.2163419
2y vs 5y p-value
0.9770439

```



Sagittal T5-T12

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 34.28844 20.32198 218
2:      depuy 32.96492 18.11270 256
[1] "p_val"
[1] 0.4580809
```

6W. Sagittal T5-T12

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 32.50063 14.42793 205
2:      depuy 35.69605 13.91589 215
[1] "p_val"
[1] 0.02146717
```

6W. Sagittal T5-T12\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy -1.914293 17.08062 198
2:      depuy  2.095472 14.96915 212
[1] "p_val"
[1] 0.01210767
```

```

2Y. Sagittal T5-T12
[1] "stats"
      type      mean      sd    N
1: non-depuy 36.18217 15.29005 203
2:      depuy 38.25457 17.79996 197
[1] "p_val"
[1] 0.2129917

```

```

2Y. Sagittal T5-T12_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy 2.232143 19.00179 196
2:      depuy 5.453264 18.20645 193
[1] "p_val"
[1] 0.08857456

```

```

5Y. Sagittal T5-T12
[1] "stats"
      type      mean      sd    N
1: non-depuy 38.83236 15.11470  89
2:      depuy 40.96510 16.65305 100
[1] "p_val"
[1] 0.3572412

```

```

5Y. Sagittal T5-T12_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy 6.621279 18.71323  86
2:      depuy 6.175306 19.07617  98
[1] "p_val"
[1] 0.8731899

```

```

Sagittal T5-T12 tests
preop vs 6w p-value
0.6157915
6w vs 2y p-value
0.004359271

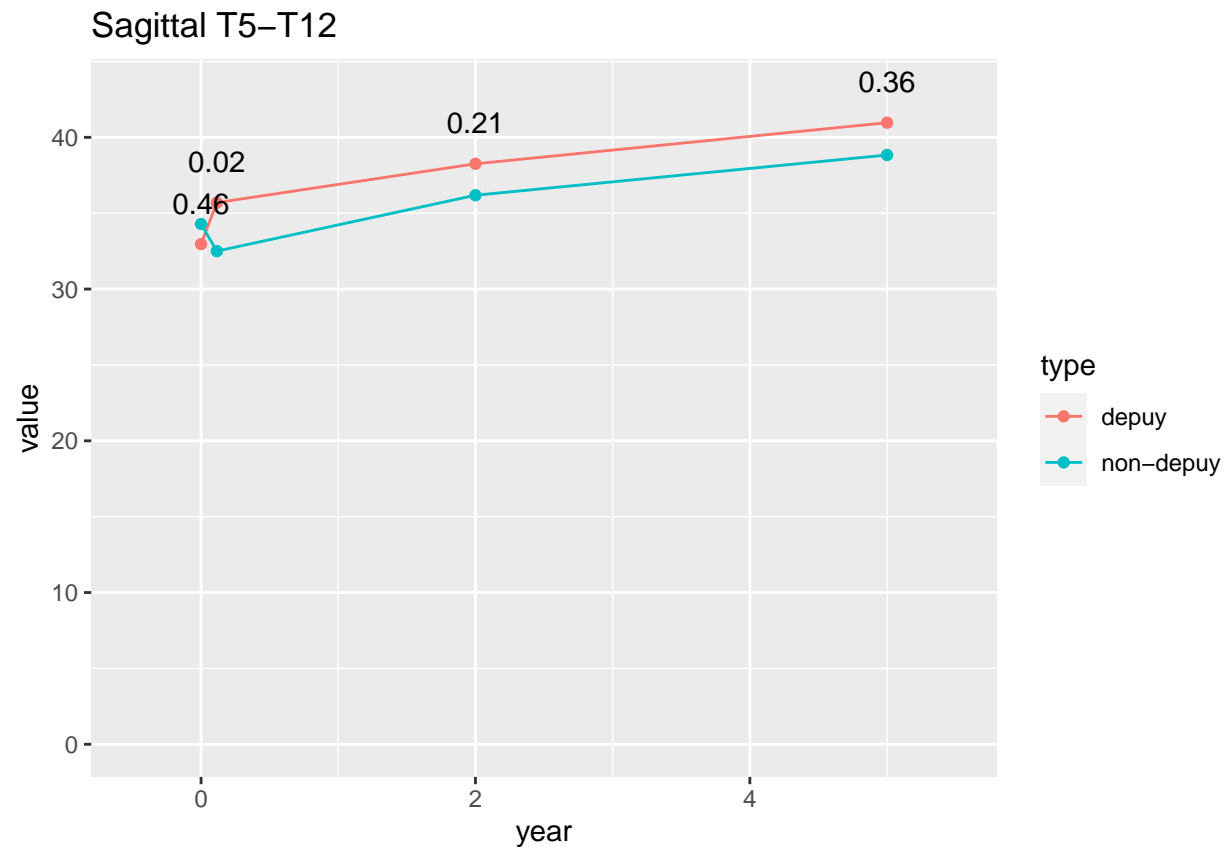
```

```

6w vs 5y p-value
5.94902e-06
2y vs 5y p-value
0.028313

```





Sagittal T2–T12

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 39.42756 21.49512 217
2:      depuy 40.48218 18.77018 257
[1] "p_val"
[1] 0.5732438
```

6W. Sagittal T2–T12

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 41.97034 16.4835 208
2:      depuy 45.33738 14.8070 214
[1] "p_val"
[1] 0.02797363
```

6W. Sagittal T2–T12\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 2.280644 16.48887 202
2:      depuy 5.021991 14.96054 211
[1] "p_val"
[1] 0.07797381
```

```

2Y. Sagittal T2-T12
[1] "stats"
      type      mean      sd    N
1: non-depuy 46.84286 17.26746 203
2:      depuy 47.74141 16.22654 198
[1] "p_val"
[1] 0.5914809

```

```

2Y. Sagittal T2-T12_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy 7.971173 17.07820 196
2:      depuy 7.498974 15.84751 195
[1] "p_val"
[1] 0.777014

```

```

5Y. Sagittal T2-T12
[1] "stats"
      type      mean      sd    N
1: non-depuy 47.82477 17.05582  88
2:      depuy 50.60890 16.49591 100
[1] "p_val"
[1] 0.2582582

```

```

5Y. Sagittal T2-T12_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy 11.23059 16.34829  85
2:      depuy 10.72969 17.26895  98
[1] "p_val"
[1] 0.8406374

```

```

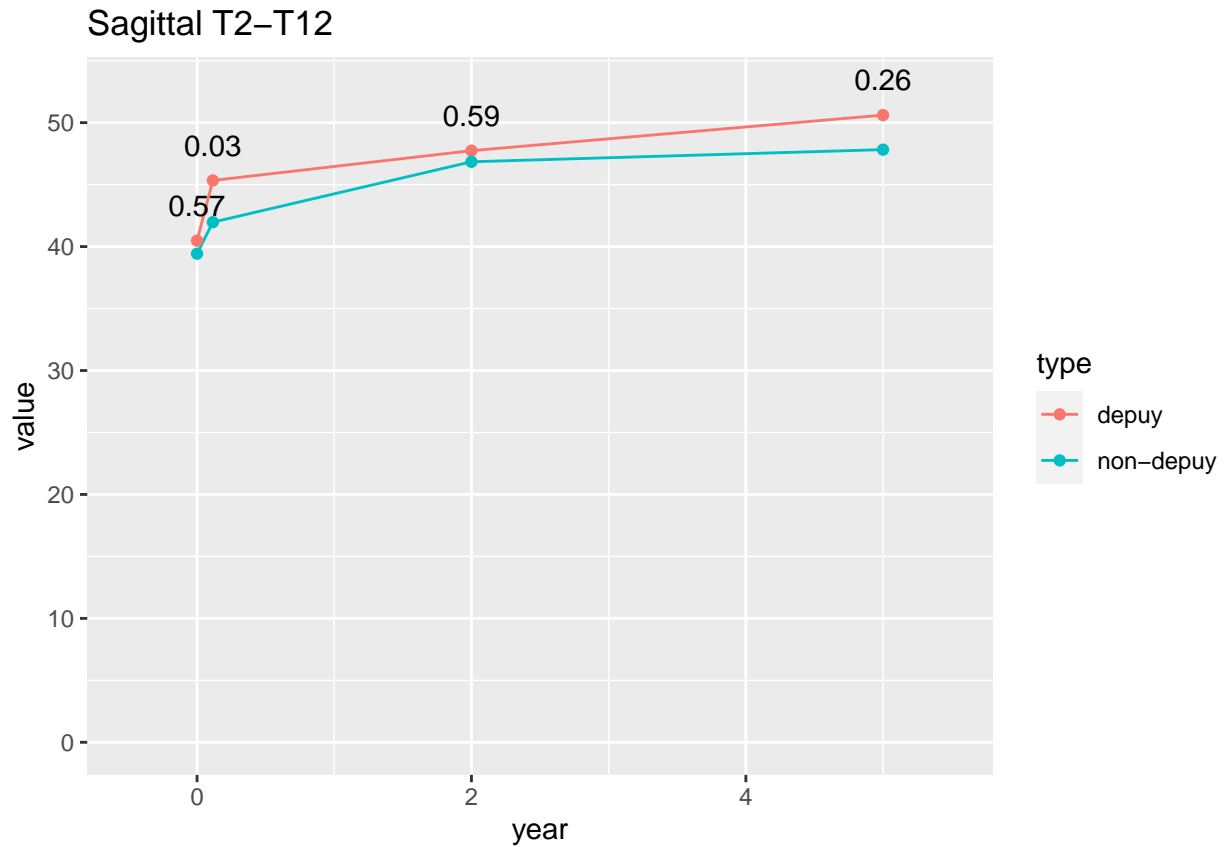
Sagittal T2-T12 tests
preop vs 6w p-value
0.002194747
6w vs 2y p-value
0.002146986

```

```

6w vs 5y p-value
0.0001000708
2y vs 5y p-value
0.1303354

```



Lordosis (top of L1-S1)

```
[1] "stats"
      type      mean      sd    N
1: non-depuy -45.67901 21.12223 223
2:      depuy -43.91152 20.46163 257
[1] "p_val"
[1] 0.3540327
```

6W. Lordosis (top of L1-S1)

```
[1] "stats"
      type      mean      sd    N
1: non-depuy -51.49413 13.60404 213
2:      depuy -51.20455 15.15762 244
[1] "p_val"
[1] 0.8296954
```

6W. Lordosis (top of L1-S1)\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy -4.943381 18.92697 210
2:      depuy -7.252490 16.96974 241
[1] "p_val"
[1] 0.1758928
```

```

2Y. Lordosis (top of L1-S1)
[1] "stats"
      type      mean      sd    N
1: non-depuy -51.87279 13.80752 204
2:      depuy -50.75933 17.02414 210
[1] "p_val"
[1] 0.4646788

```

```

2Y. Lordosis (top of L1-S1)_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy -6.609552 17.21253 201
2:      depuy -7.919469 16.15797 207
[1] "p_val"
[1] 0.4288055

```

```

5Y. Lordosis (top of L1-S1)
[1] "stats"
      type      mean      sd    N
1: non-depuy -49.90629 14.08993  89
2:      depuy -51.53990 15.65859 105
[1] "p_val"
[1] 0.445497

```

```

5Y. Lordosis (top of L1-S1)_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy -3.874943 16.43204  87
2:      depuy -8.028365 18.23201 104
[1] "p_val"
[1] 0.09963627

```

```

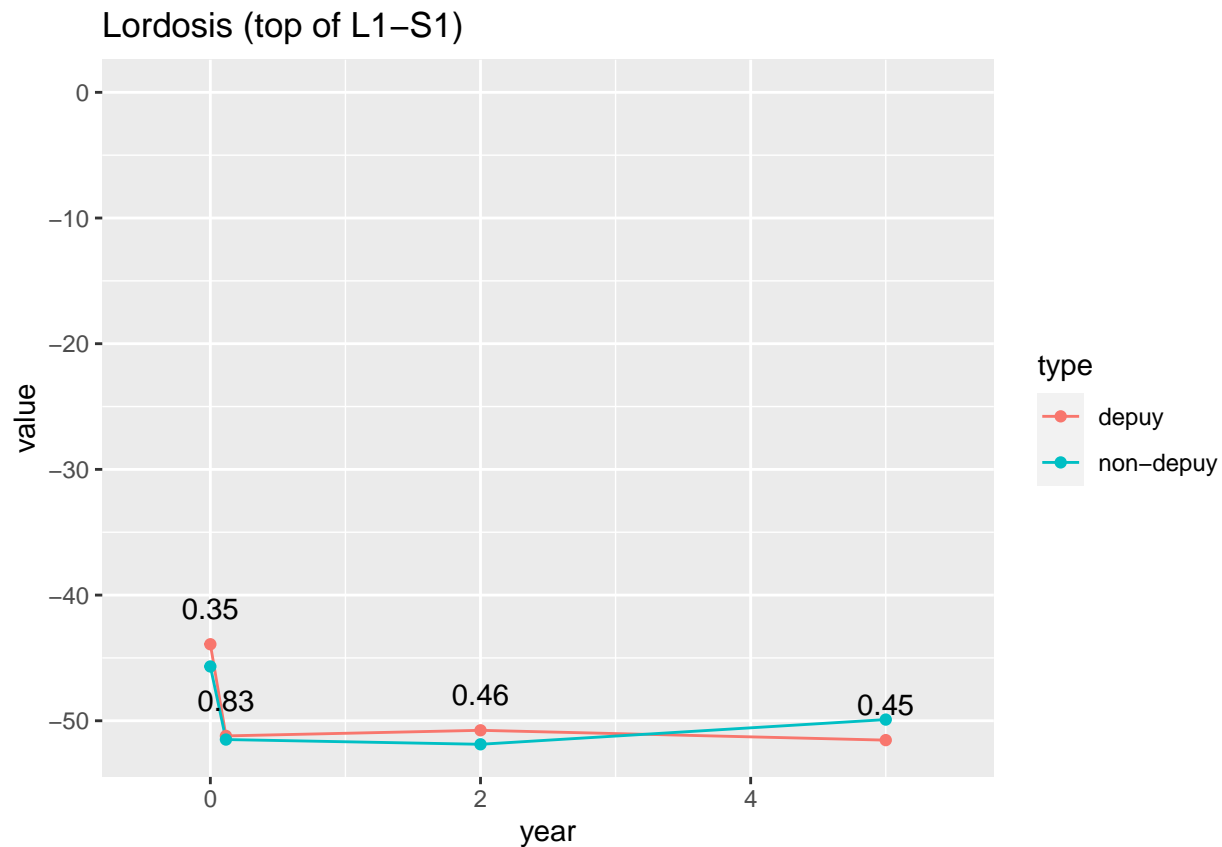
Lordosis (top of L1-S1) tests
preop vs 6w p-value
1.884805e-08
6w vs 2y p-value
0.7014898

```

```

6w vs 5y p-value
0.9073573
2y vs 5y p-value
0.6891494

```



#### Pelvic Incidence

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 55.20398 14.51866 221
2:      depuy 55.62070 13.62823 257
[1] "p_val"
[1] 0.7477202
```

#### 6W. Pelvic Incidence

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 53.25469 13.83723 211
2:      depuy 54.99855 13.07877 242
[1] "p_val"
[1] 0.1706042
```

#### 6W. Pelvic Incidence\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy -1.5042233 7.625022 206
2:      depuy -0.4490041 5.940455 241
[1] "p_val"
[1] 0.1078483
```

```

2Y. Pelvic Incidence
[1] "stats"
      type      mean      sd    N
1: non-depuy 53.86444 13.23712 205
2:      depuy 54.84374 14.01417 206
[1] "p_val"
[1] 0.4668569

```

```

2Y. Pelvic Incidence_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy -1.1162500 7.633929 200
2:      depuy -0.3151232 7.703978 203
[1] "p_val"
[1] 0.2950205

```

```

5Y. Pelvic Incidence
[1] "stats"
      type      mean      sd    N
1: non-depuy 53.56809 12.63721  89
2:      depuy 55.61771 12.29691 105
[1] "p_val"
[1] 0.2559063

```

```

5Y. Pelvic Incidence_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy -0.08229885 6.049910  87
2:      depuy -0.28252427 7.197486 103
[1] "p_val"
[1] 0.8351922

```

```

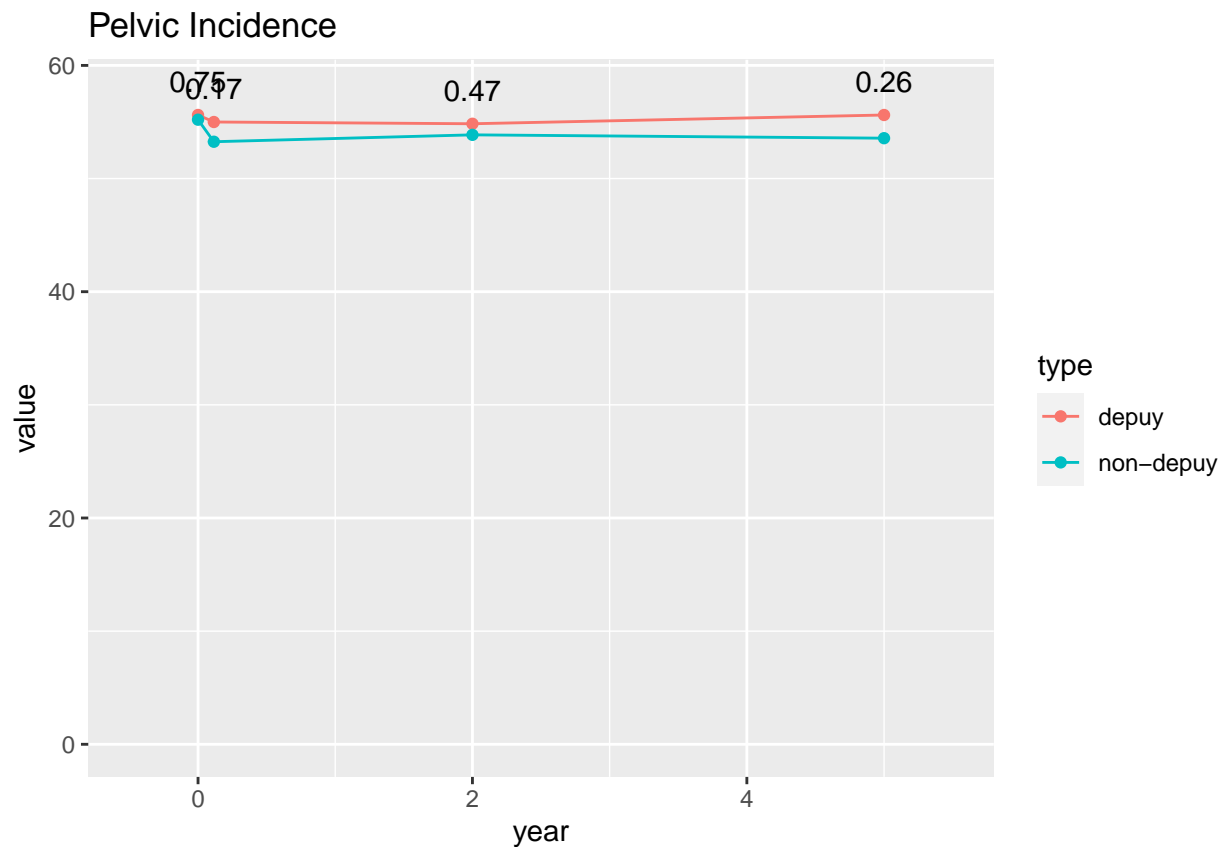
Pelvic Incidence tests
preop vs 6w p-value
0.1683717
6w vs 2y p-value
0.6969861

```

```

6w vs 5y p-value
0.6139017
2y vs 5y p-value
0.8594938

```



#### Pelvic Tilt

```
[1] "stats"
      type    mean      sd    N
1: non-depuy 21.92412 12.73628 221
2:      depuy 22.75004 10.30519 252
[1] "p_val"
[1] 0.4426958
```

#### 6W. Pelvic Tilt

```
[1] "stats"
      type    mean      sd    N
1: non-depuy 17.53148  9.679858 209
2:      depuy 19.34814  9.409235 242
[1] "p_val"
[1] 0.04469367
```

#### 6W. Pelvic Tilt\_gain

```
[1] "stats"
      type    mean      sd    N
1: non-depuy -4.018873  8.927130 204
2:      depuy -2.809873  8.593911 236
[1] "p_val"
[1] 0.1502307
```

```

2Y. Pelvic Tilt
[1] "stats"
      type      mean      sd    N
1: non-depuy 19.42741 10.278586 205
2:      depuy 20.56190  9.329106 205
[1] "p_val"
[1] 0.2426136

```

```

2Y. Pelvic Tilt_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy -2.50145 8.067849 200
2:      depuy -1.95770 7.718565 200
[1] "p_val"
[1] 0.4914047

```

```

5Y. Pelvic Tilt
[1] "stats"
      type      mean      sd    N
1: non-depuy 20.40022 10.015225  89
2:      depuy 22.56029  9.817733 105
[1] "p_val"
[1] 0.132618

```

```

5Y. Pelvic Tilt_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy -0.8275862 7.406974  87
2:      depuy -0.8238614 8.483236 101
[1] "p_val"
[1] 0.9974391

```

```

Pelvic Tilt tests
preop vs 6w p-value
3.682162e-08
6w vs 2y p-value
0.05137769

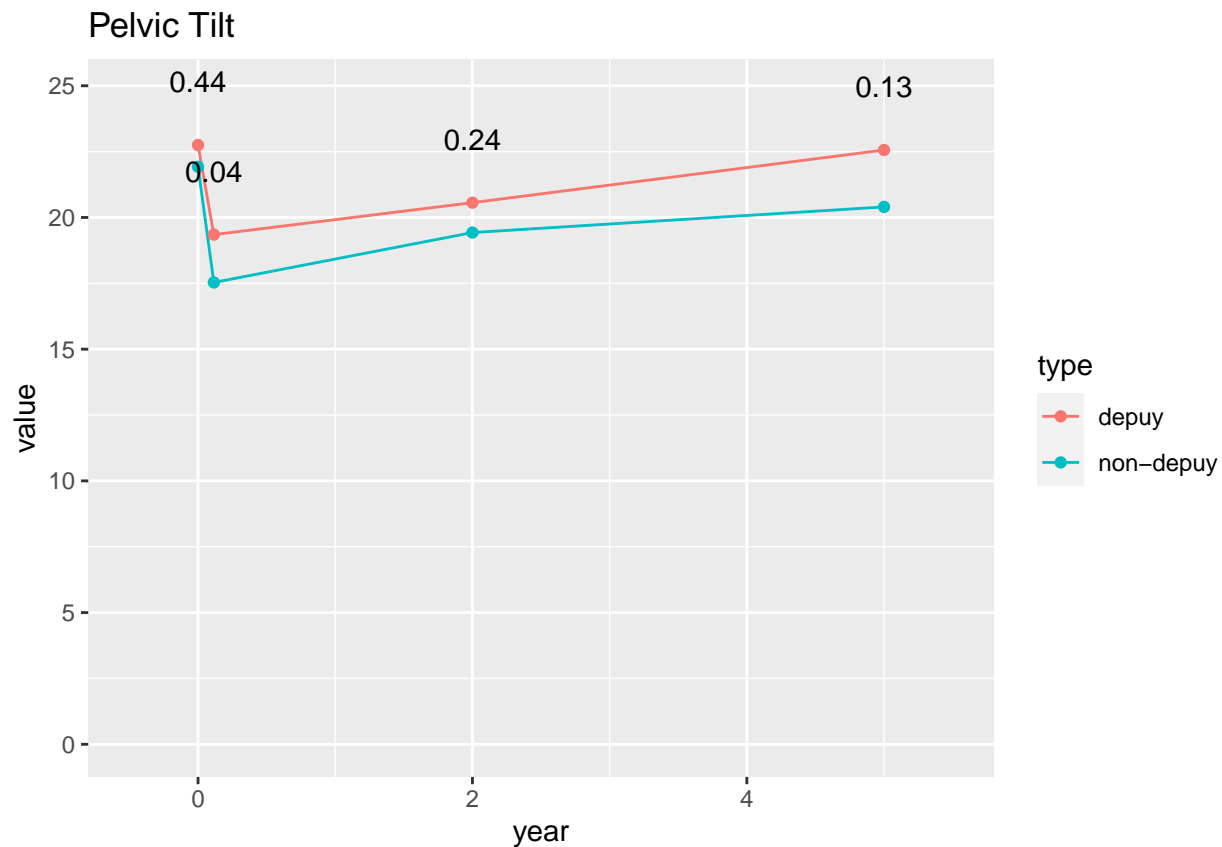
```

```

6w vs 5y p-value
0.0005237892
2y vs 5y p-value
0.05445934

```





Sacral Slope

```
[1] "stats"
      type    mean      sd    N
1: non-depuy 33.26643 11.98823 221
2:      depuy 33.33685 10.83705 257
[1] "p_val"
[1] 0.9466716
```

6W. Sacral Slope

```
[1] "stats"
      type    mean      sd    N
1: non-depuy 35.82830 10.84162 212
2:      depuy 35.51189 10.26095 243
[1] "p_val"
[1] 0.7503563
```

6W. Sacral Slope\_gain

```
[1] "stats"
      type    mean      sd    N
1: non-depuy 2.468164 9.52479 207
2:      depuy 2.207510 8.16113 241
[1] "p_val"
[1] 0.7579849
```

```

2Y. Sacral Slope
[1] "stats"
      type      mean      sd    N
1: non-depuy 34.44702 10.70244 205
2:      depuy 34.36277 11.63987 206
[1] "p_val"
[1] 0.9391429

```

```

2Y. Sacral Slope_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy 1.410400 8.678281 200
2:      depuy 1.667685 7.566759 203
[1] "p_val"
[1] 0.7513901

```

```

5Y. Sacral Slope
[1] "stats"
      type      mean      sd    N
1: non-depuy 33.16730 10.07330  89
2:      depuy 33.05762 10.26091 105
[1] "p_val"
[1] 0.9403512

```

```

5Y. Sacral Slope_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy 0.7217241 8.348501  87
2:      depuy 0.5066990 8.571521 103
[1] "p_val"
[1] 0.8614846

```

```

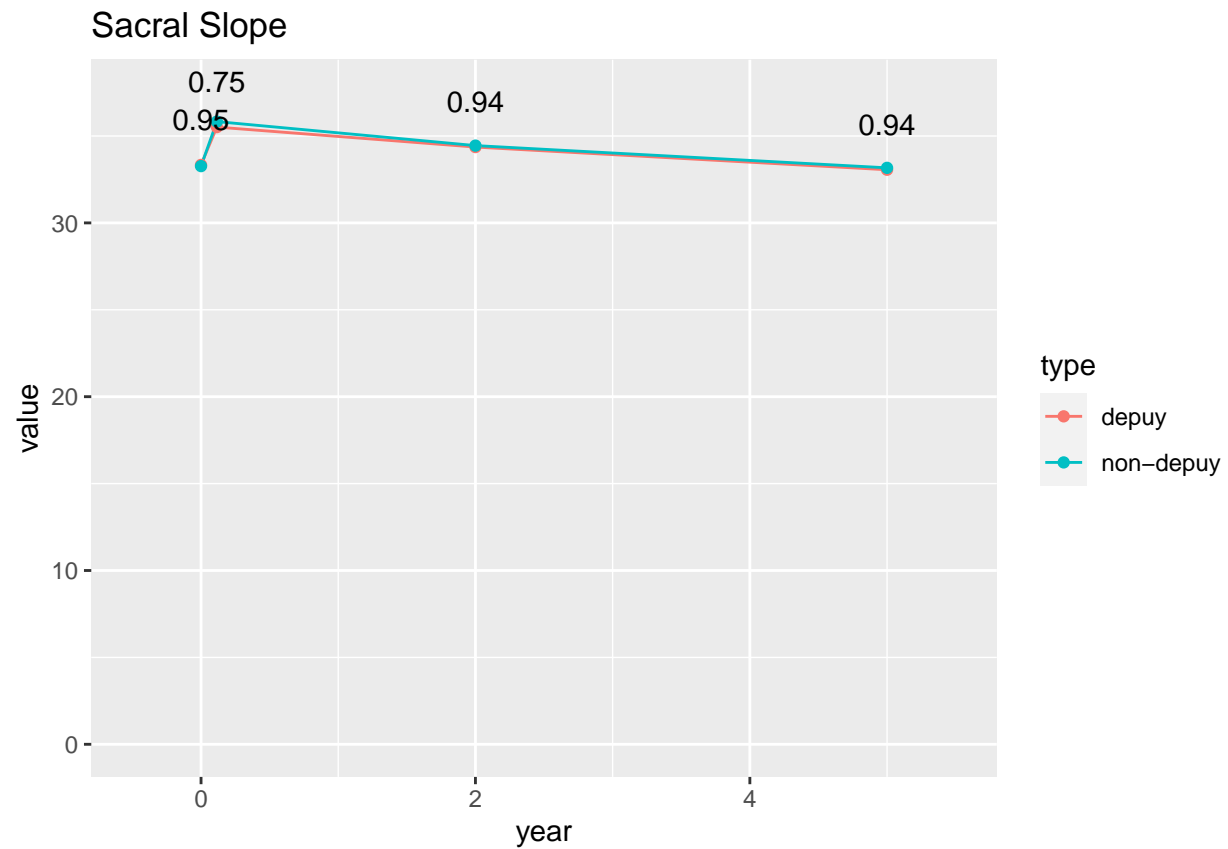
Sacral Slope tests
preop vs 6w p-value
0.00105845
6w vs 2y p-value
0.2463188

```

```

6w vs 5y p-value
0.008328968
2y vs 5y p-value
0.1063461

```



```
RLL
[1] "stats"
      type      mean      sd    N
1: non-depuy -17.56814 22.22158 221
2:      depuy -19.59184 19.76760 255
[1] "p_val"
[1] 0.2976521
```

```
6W. RLL
[1] "stats"
      type      mean      sd    N
1: non-depuy -10.38190 12.76805 211
2:      depuy -11.87792 13.80319 240
[1] "p_val"
[1] 0.2326054
```

```
6W. RLL_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy  6.121893 19.24321 206
2:      depuy  7.648650 17.14234 237
[1] "p_val"
[1] 0.381529
```

```

2Y. RLL
[1] "stats"
      type      mean      sd    N
1: non-depuy -10.46804 12.82931 204
2:      depuy -12.18534 15.14401 206
[1] "p_val"
[1] 0.2159585

```

```

2Y. RLL_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy  7.381005 17.22894 199
2:      depuy  8.237094 16.74428 203
[1] "p_val"
[1] 0.6137753

```

```

5Y. RLL
[1] "stats"
      type      mean      sd    N
1: non-depuy  -7.553034  7.863206  89
2:      depuy -11.943333 13.986126 105
[1] "p_val"
[1] 0.006704694

```

```

5Y. RLL_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy  8.743908 15.54274  87
2:      depuy  8.276311 17.61951 103
[1] "p_val"
[1] 0.8461406

```

```

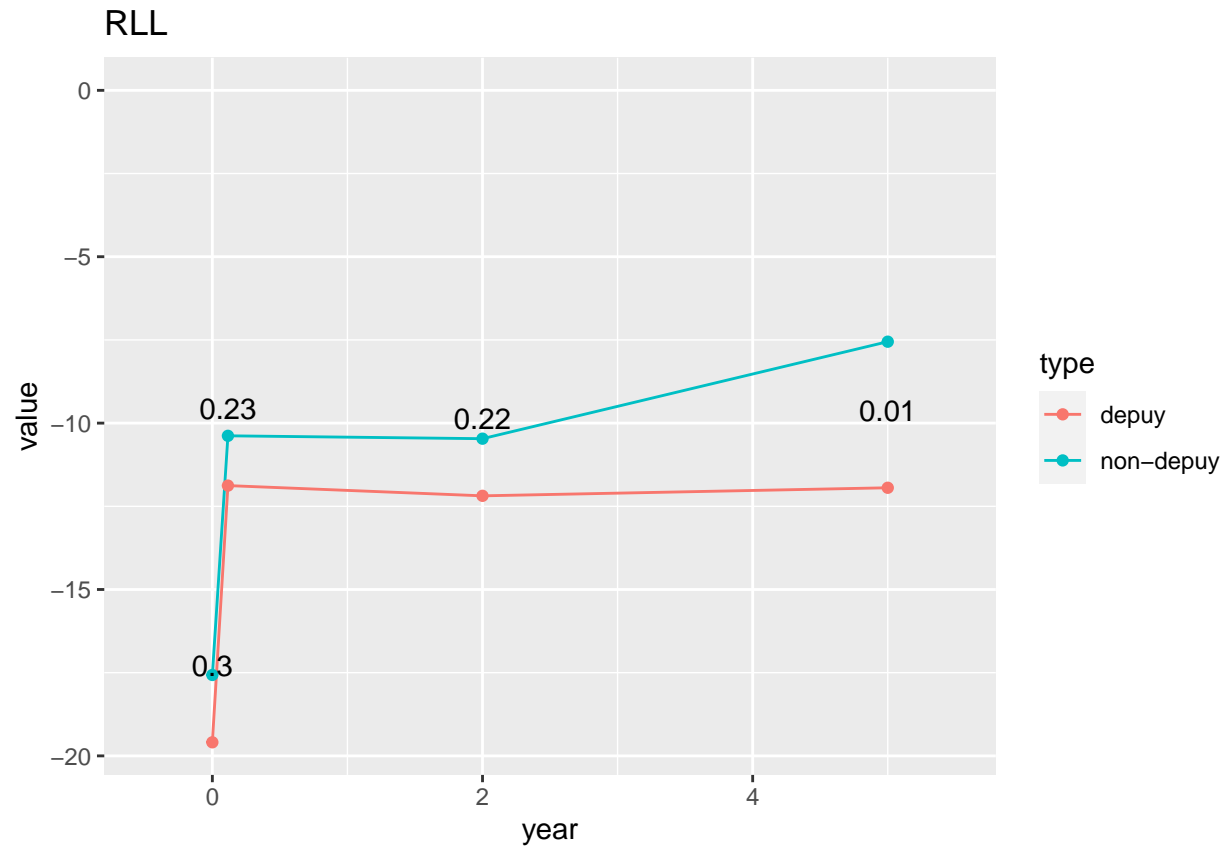
RLL tests
preop vs 6w p-value
1.269272e-10
6w vs 2y p-value
0.8665957

```

```

6w vs 5y p-value
0.0902822
2y vs 5y p-value
0.1405227

```



Global Tilt

[1] "stats"

|    | type      | mean     | sd       | N   |
|----|-----------|----------|----------|-----|
| 1: | non-depuy | 26.17470 | 19.61141 | 217 |
| 2: | depuy     | 27.58839 | 16.54390 | 249 |

[1] "p\_val"

[1] 0.404611

6W. Global Tilt

[1] "stats"

|    | type      | mean     | sd       | N   |
|----|-----------|----------|----------|-----|
| 1: | non-depuy | 17.95614 | 12.53273 | 207 |
| 2: | depuy     | 21.00552 | 12.02162 | 212 |

[1] "p\_val"

[1] 0.0114254

6W. Global Tilt\_gain

[1] "stats"

|    | type      | mean      | sd       | N   |
|----|-----------|-----------|----------|-----|
| 1: | non-depuy | -7.270200 | 14.54981 | 200 |
| 2: | depuy     | -6.788585 | 13.45752 | 205 |

[1] "p\_val"

[1] 0.7298197

```

2Y. Global Tilt
[1] "stats"
      type      mean      sd    N
1: non-depuy 20.87402 14.46387 204
2:      depuy 23.11865 13.29363 193
[1] "p_val"
[1] 0.1079635

```

```

2Y. Global Tilt_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy -5.165127 12.50158 197
2:      depuy -4.994270 12.36767 185
[1] "p_val"
[1] 0.893291

```

```

5Y. Global Tilt
[1] "stats"
      type      mean      sd    N
1: non-depuy 22.73539 15.64267  89
2:      depuy 25.64067 14.29661 105
[1] "p_val"
[1] 0.1817117

```

```

5Y. Global Tilt_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy -0.250814 11.87755  86
2:      depuy -3.243762 12.99761 101
[1] "p_val"
[1] 0.1018191

```

```

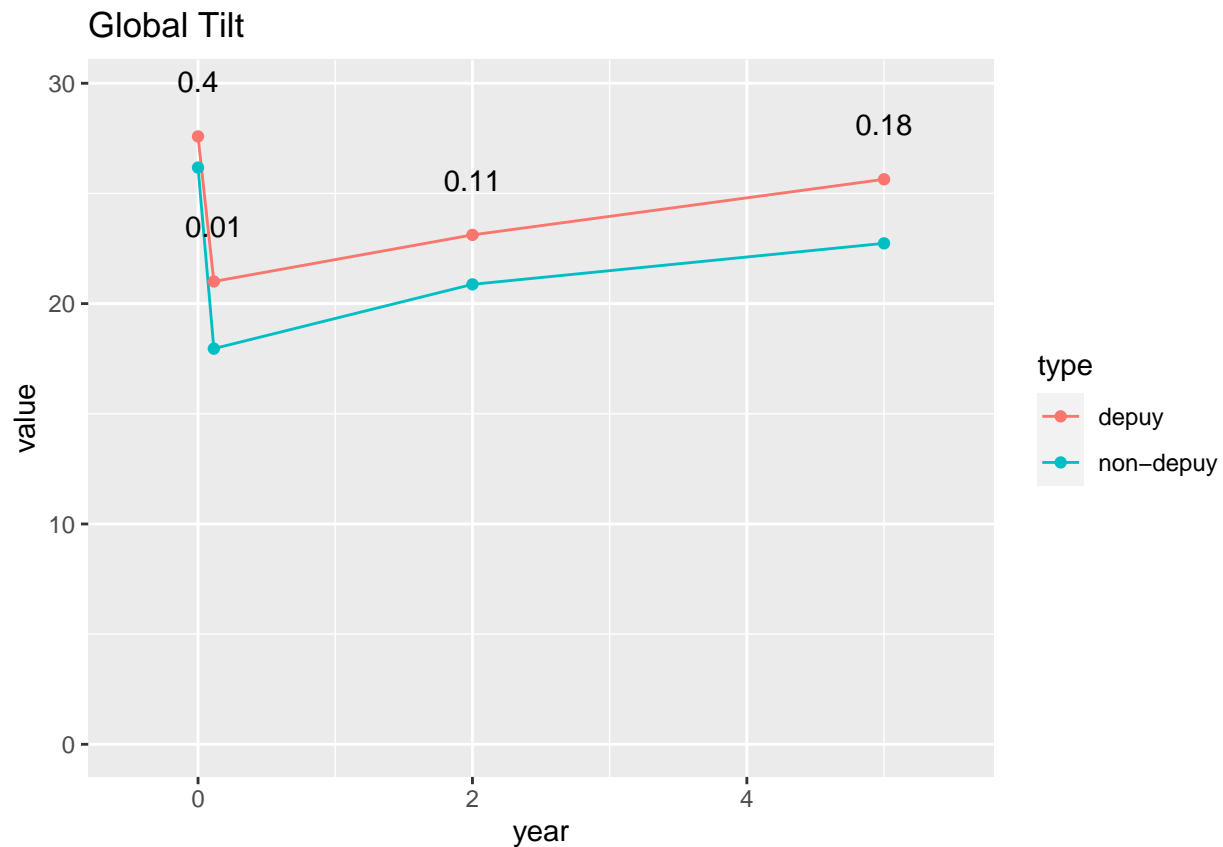
Global Tilt tests
preop vs 6w p-value
1.259254e-12
6w vs 2y p-value
0.02613935

```

```

6w vs 5y p-value
0.0003254208
2y vs 5y p-value
0.06030254

```



T1 Sagittal Tilt

```
[1] "stats"
      type      mean      sd    N
1: non-depuy -1.949740 6.401253 216
2:      depuy -1.332452 6.048663 236
[1] "p_val"
[1] 0.2936738
```

6W. T1 Sagittal Tilt

```
[1] "stats"
      type      mean      sd    N
1: non-depuy -3.622453 4.019764 201
2:      depuy -3.024548 4.095851 204
[1] "p_val"
[1] 0.13895
```

6W. T1 Sagittal Tilt\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy -1.614733 5.897189 192
2:      depuy -2.009877 5.768438 186
[1] "p_val"
[1] 0.510589
```

```

2Y. T1 Sagittal Tilt
[1] "stats"
      type      mean      sd    N
1: non-depuy -3.931485 4.426703 201
2:      depuy -2.848121 4.563325 190
[1] "p_val"
[1] 0.01776685

```

```

2Y. T1 Sagittal Tilt_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy -1.959632 5.703220 192
2:      depuy -1.645837 6.376807 172
[1] "p_val"
[1] 0.6226238

```

```

5Y. T1 Sagittal Tilt
[1] "stats"
      type      mean      sd    N
1: non-depuy -3.015001 5.325634  89
2:      depuy -2.581622 4.411856 105
[1] "p_val"
[1] 0.5423924

```

```

5Y. T1 Sagittal Tilt_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy  0.367310 5.806073  85
2:      depuy -1.575673 6.040897  97
[1] "p_val"
[1] 0.02836212

```

```

T1 Sagittal Tilt tests
preop vs 6w p-value
2.255719e-06
6w vs 2y p-value
0.6792338

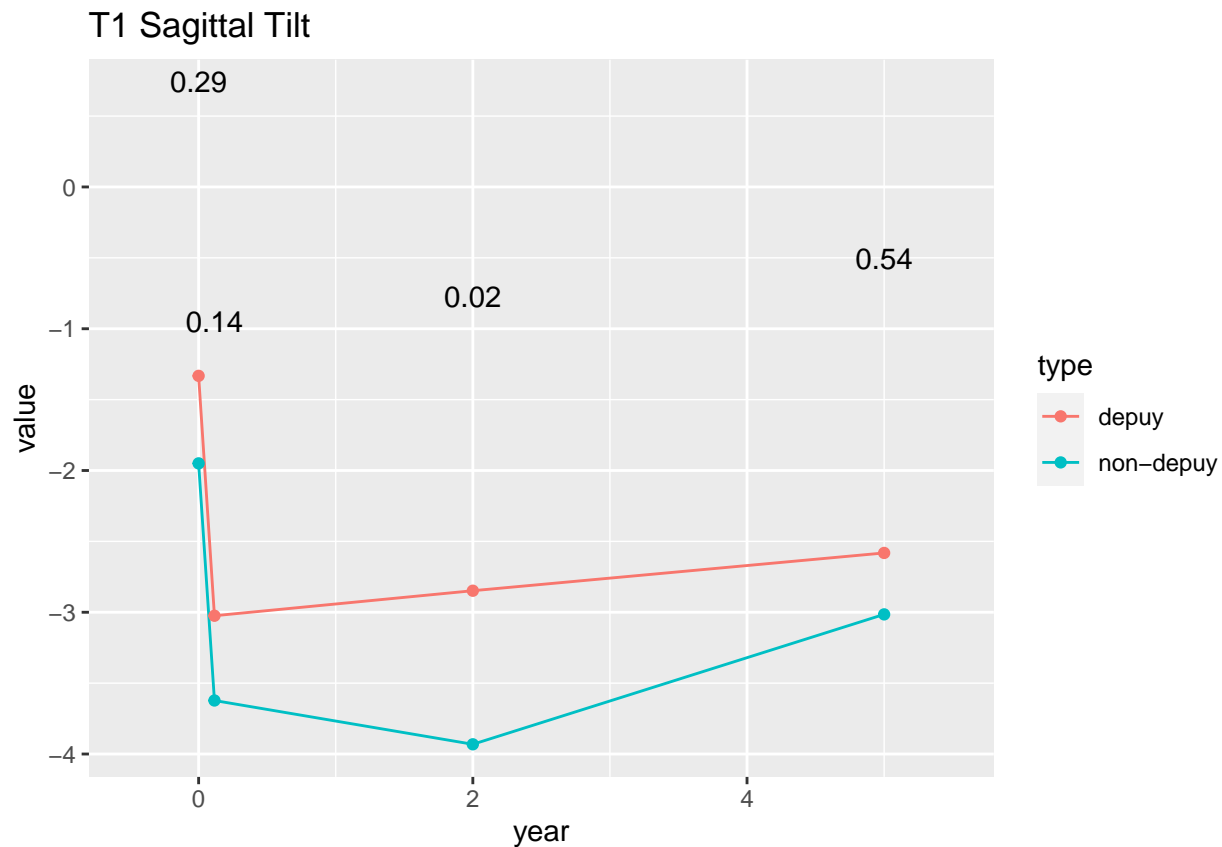
```

```

6w vs 5y p-value
0.357757
2y vs 5y p-value
0.2404744

```





Thoracolumbar L2-T10

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 8.621674 22.47005 221
2:      depuy 9.153439 20.61571 253
[1] "p_val"
[1] 0.7895376
```

6W. Thoracolumbar L2-T10

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 2.447707 12.91042 205
2:      depuy 5.079585 11.01987 217
[1] "p_val"
[1] 0.02522341
```

6W. Thoracolumbar L2-T10\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy -6.286269 21.75903 201
2:      depuy -4.931043 18.57426 211
[1] "p_val"
[1] 0.4979094
```

2Y. Thoracolumbar L2-T10

[1] "stats"

|    | type      | mean     | sd       | N   |
|----|-----------|----------|----------|-----|
| 1: | non-depuy | 4.927255 | 14.07600 | 204 |
| 2: | depuy     | 8.250452 | 12.79427 | 199 |

[1] "p\_val"

[1] 0.01350422

2Y. Thoracolumbar L2-T10\_gain

[1] "stats"

|    | type      | mean      | sd       | N   |
|----|-----------|-----------|----------|-----|
| 1: | non-depuy | -4.078650 | 22.27995 | 200 |
| 2: | depuy     | -1.825928 | 18.65052 | 194 |

[1] "p\_val"

[1] 0.2766022

5Y. Thoracolumbar L2-T10

[1] "stats"

|    | type      | mean     | sd       | N   |
|----|-----------|----------|----------|-----|
| 1: | non-depuy | 4.865281 | 13.20502 | 89  |
| 2: | depuy     | 8.460294 | 13.21988 | 102 |

[1] "p\_val"

[1] 0.06223789

5Y. Thoracolumbar L2-T10\_gain

[1] "stats"

|    | type      | mean      | sd       | N   |
|----|-----------|-----------|----------|-----|
| 1: | non-depuy | -8.816667 | 20.58039 | 87  |
| 2: | depuy     | -3.017228 | 20.27679 | 101 |

[1] "p\_val"

[1] 0.05396865

Thoracolumbar L2-T10 tests

preop vs 6w p-value

9.924242e-06

6w vs 2y p-value

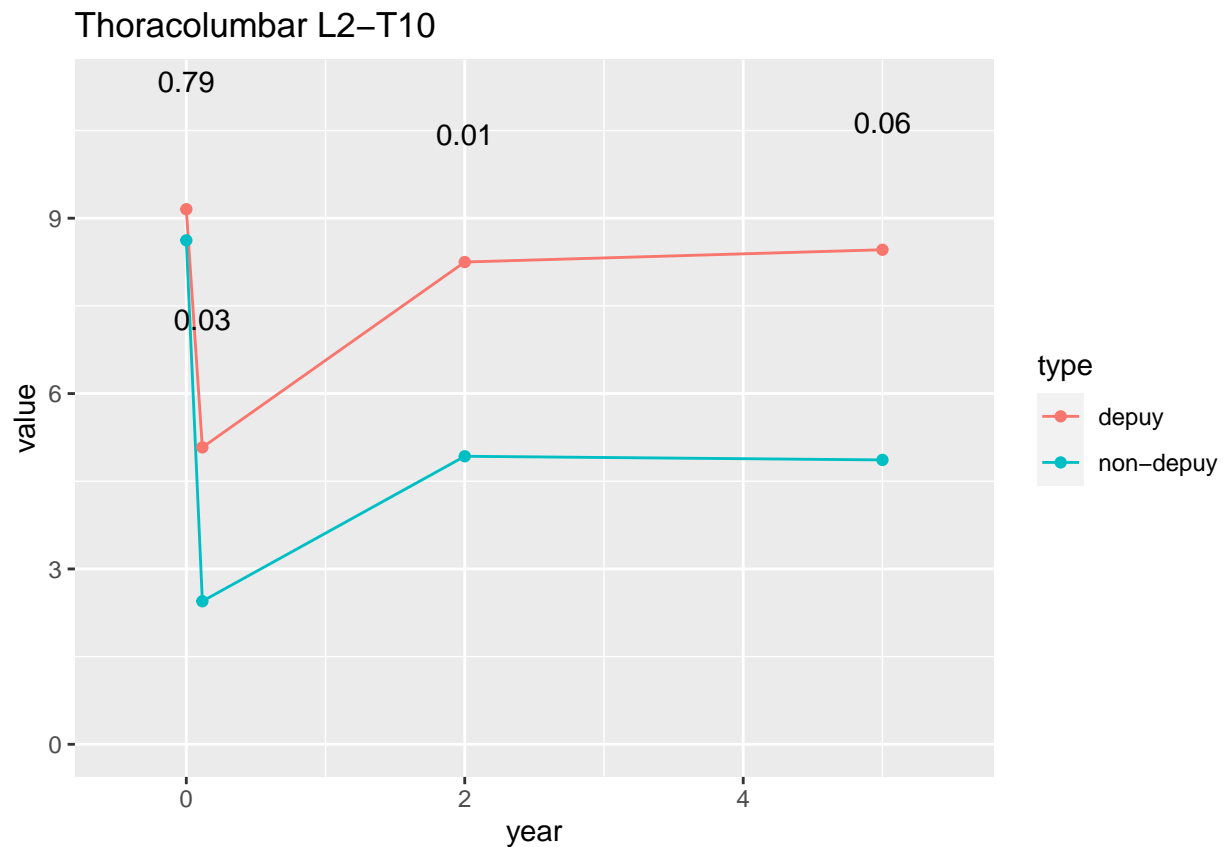
0.01257335

6w vs 5y p-value

0.01942851

2y vs 5y p-value

0.6797673



```
RSA
[1] "stats"
      type      mean      sd    N
1: non-depuy 14.59972 16.66320 217
2:      depuy 15.84237 14.19187 249
[1] "p_val"
[1] 0.3903373
```

```
6W. RSA
[1] "stats"
      type      mean      sd    N
1: non-depuy  7.380193  9.868614 207
2:      depuy  9.470991  9.727611 212
[1] "p_val"
[1] 0.02955139
```

```
6W. RSA_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy -6.530850 13.85988 200
2:      depuy -6.511902 12.73589 205
[1] "p_val"
[1] 0.988585
```

```

2Y. RSA
[1] "stats"
      type      mean      sd    N
1: non-depuy  9.93951 11.89568 204
2:      depuy 11.64694 11.58317 193
[1] "p_val"
[1] 0.1481794

```

```

2Y. RSA_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy -4.664873 12.00445 197
2:      depuy -4.868162 11.29735 185
[1] "p_val"
[1] 0.8646979

```

```

5Y. RSA
[1] "stats"
      type      mean      sd    N
1: non-depuy -12.14809 14.06182  89
2:      depuy  13.94419 12.42085 105
[1] "p_val"
[1] 2.932878e-29

```

```

5Y. RSA_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy -25.570349 23.05929  86
2:      depuy  -3.137228 12.37460 101
[1] "p_val"
[1] 4.512799e-13

```

```

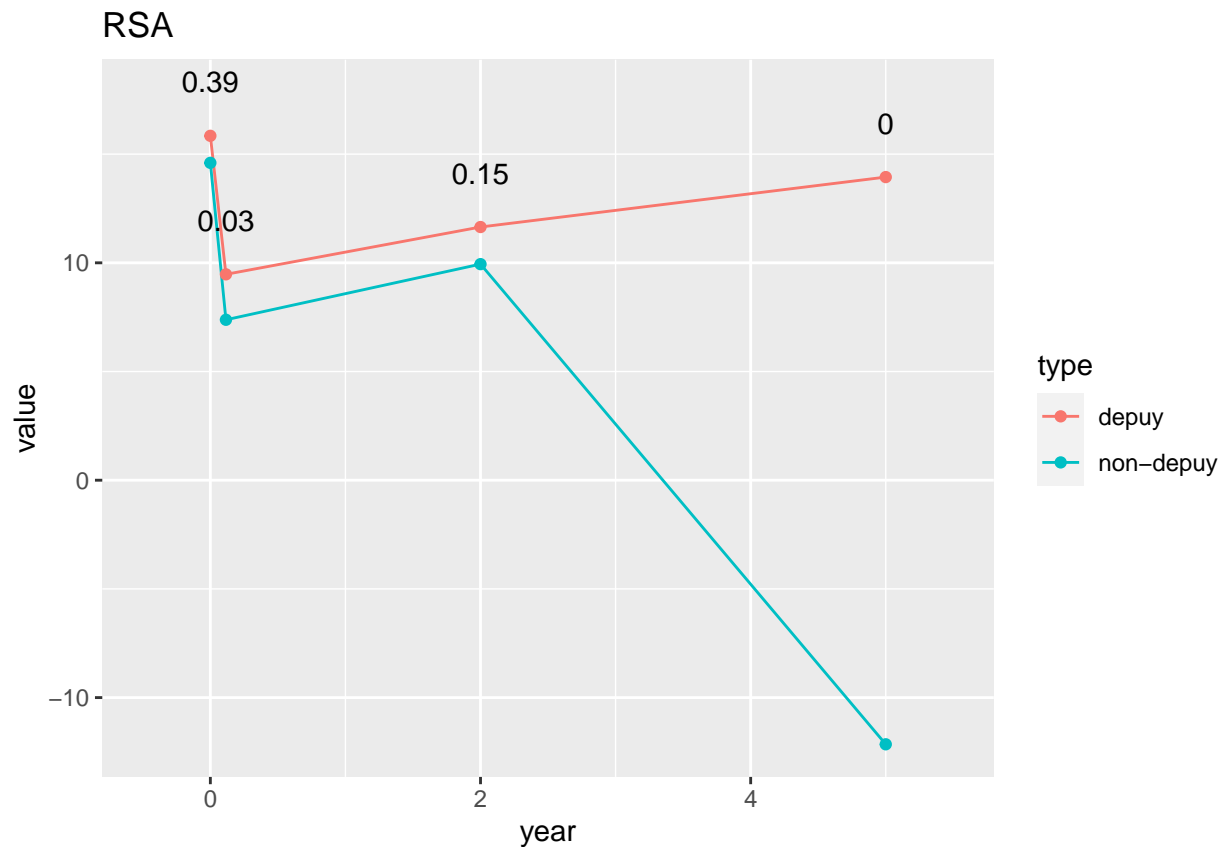
RSA tests
preop vs 6w p-value
6.90951e-15
6w vs 2y p-value
0.01537264

```

```

6w vs 5y p-value
3.24611e-07
2y vs 5y p-value
1.035372e-09

```



```
RPV
[1] "stats"
      type      mean      sd    N
1: non-depuy -8.303982 10.178047 221
2:      depuy -8.551211  8.454638 256
[1] "p_val"
[1] 0.775121
```

```
6W. RPV
[1] "stats"
      type      mean      sd    N
1: non-depuy -4.550047 7.635866 211
2:      depuy -5.947521 7.411339 242
[1] "p_val"
[1] 0.04948777
```

```
6W. RPV_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy 3.382330 8.359279 206
2:      depuy 2.464625 7.898114 240
[1] "p_val"
[1] 0.2364371
```

```

2Y. RPV
[1] "stats"
      type      mean      sd    N
1: non-depuy -6.333122 8.191092 205
2:      depuy -6.995340 7.811603 206
[1] "p_val"
[1] 0.4021575

```

```

2Y. RPV_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy 2.068750 7.421364 200
2:      depuy 1.875743 6.702846 202
[1] "p_val"
[1] 0.7845686

```

```

5Y. RPV
[1] "stats"
      type      mean      sd    N
1: non-depuy 61.577978 10.287711 89
2:      depuy -8.756857 7.966381 105
[1] "p_val"
[1] 1.314478e-104

```

```

5Y. RPV_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy 69.8302299 13.948638 87
2:      depuy 0.6730097 7.706509 103
[1] "p_val"
[1] 4.338483e-76

```

```

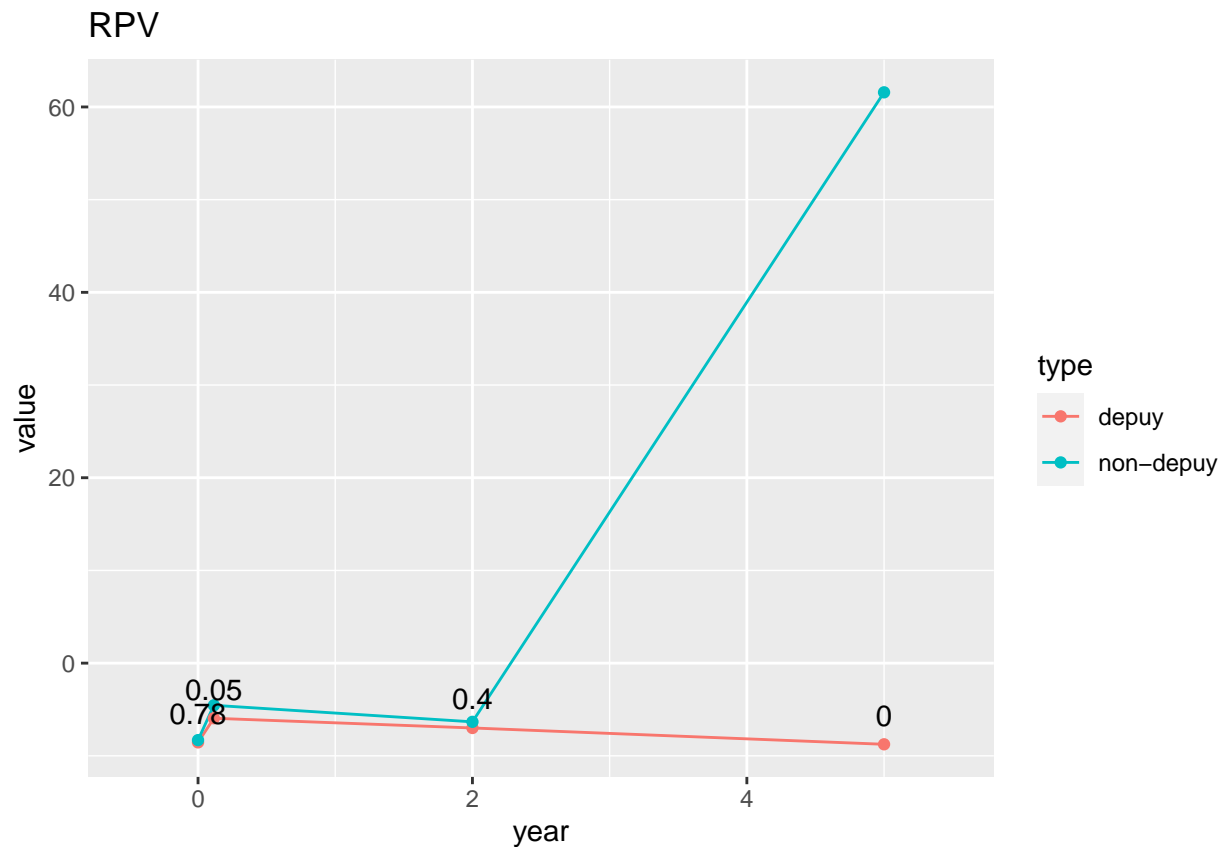
RPV tests
preop vs 6w p-value
1.871233e-08
6w vs 2y p-value
0.04040581

```

```

6w vs 5y p-value
1.57376e-23
2y vs 5y p-value
1.143171e-24

```



### Quality of Life

ODI - Score (%)\_First Visit

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 35.89401 20.49306 217
2:      depuy 40.46341 19.57082 246
[1] "p_val"
[1] 0.01486391
```

6M. ODI - Score (%)

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 25.83333 16.69289 192
2:      depuy 30.02500 17.82573 240
[1] "p_val"
[1] 0.01223778
```

6M. ODI - Score (%)\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy -9.869565 18.72681 184
2:      depuy -10.982456 16.95679 228
```

```
[1] "p_val"  
[1] 0.5321214
```

2Y. ODI - Score (%)

```
[1] "stats"  
      type      mean      sd    N  
1: non-depuy 24.68780 20.24337 205  
2:      depuy 29.39024 21.06477 246  
[1] "p_val"  
[1] 0.01629897
```

2Y. ODI - Score (%)\_gain

```
[1] "stats"  
      type      mean      sd    N  
1: non-depuy -11.00478 17.63233 209  
2:      depuy -11.19087 16.99427 241  
[1] "p_val"  
[1] 0.9096508
```

5Y. ODI - Score (%)

```
[1] "stats"  
      type      mean      sd    N  
1: non-depuy 27.94958 23.35353 119  
2:      depuy 28.55056 20.51567 178  
[1] "p_val"  
[1] 0.8198455
```

5Y. ODI - Score (%)\_gain

```
[1] "stats"  
      type      mean      sd    N  
1: non-depuy -8.975207 18.59411 121  
2:      depuy -10.943182 17.19492 176  
[1] "p_val"  
[1] 0.3564524
```

ODI - Score (%)\_First Visit tests

preop vs 6m p-value

1.97693e-15

6m vs 2y p-value

0.4810167

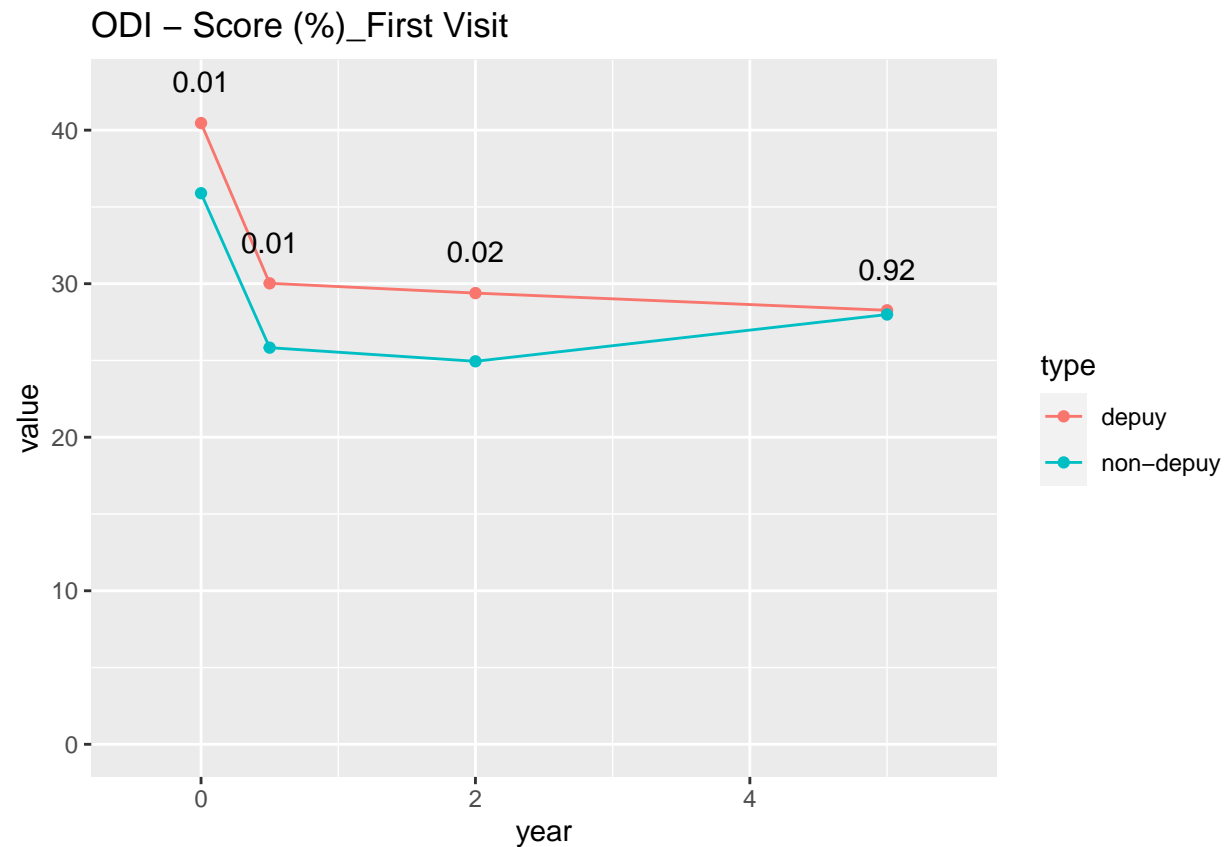
6m vs 5y p-value

0.9221599

2y vs 5y p-value

0.5073999





SRS22 - Function / Activity\_First Visit

```
[1] "stats"
      type      mean      sd    N
1: non-depu 3.173194 0.9020547 216
2:      depu 2.989073 0.8069337 248
[1] "p_val"
[1] 0.02175911
```

6M. SRS22 - Function / Activity

```
[1] "stats"
      type      mean      sd    N
1: non-depu 3.368718 0.7841693 195
2:      depu 3.178347 0.7885638 242
[1] "p_val"
[1] 0.01222925
```

6M. SRS22 - Function / Activity\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depu 0.1899468 0.7683669 188
2:      depu 0.1995671 0.7791075 231
[1] "p_val"
[1] 0.8992654
```

2Y. SRS22 - Function / Activity

[1] "stats"

|    | type      | mean     | sd        | N   |
|----|-----------|----------|-----------|-----|
| 1: | non-depuy | 3.648049 | 0.9287331 | 205 |
| 2: | depuy     | 3.396382 | 0.9253881 | 246 |

[1] "p\_val"

[1] 0.004303619

2Y. SRS22 - Function / Activity\_gain

[1] "stats"

|    | type      | mean      | sd        | N   |
|----|-----------|-----------|-----------|-----|
| 1: | non-depuy | 0.4748325 | 0.7558885 | 209 |
| 2: | depuy     | 0.3918852 | 0.7216206 | 244 |

[1] "p\_val"

[1] 0.2351489

5Y. SRS22 - Function / Activity

[1] "stats"

|    | type      | mean     | sd        | N   |
|----|-----------|----------|-----------|-----|
| 1: | non-depuy | 3.582479 | 1.0011379 | 121 |
| 2: | depuy     | 3.457303 | 0.8734091 | 178 |

[1] "p\_val"

[1] 0.2653395

5Y. SRS22 - Function / Activity\_gain

[1] "stats"

|    | type      | mean      | sd        | N   |
|----|-----------|-----------|-----------|-----|
| 1: | non-depuy | 0.4424390 | 0.8488646 | 123 |
| 2: | depuy     | 0.4497207 | 0.7286060 | 179 |

[1] "p\_val"

[1] 0.9382783

SRS22 - Function / Activity\_First Visit tests

preop vs 6m p-value

0.0006230904

6m vs 2y p-value

2.229287e-05

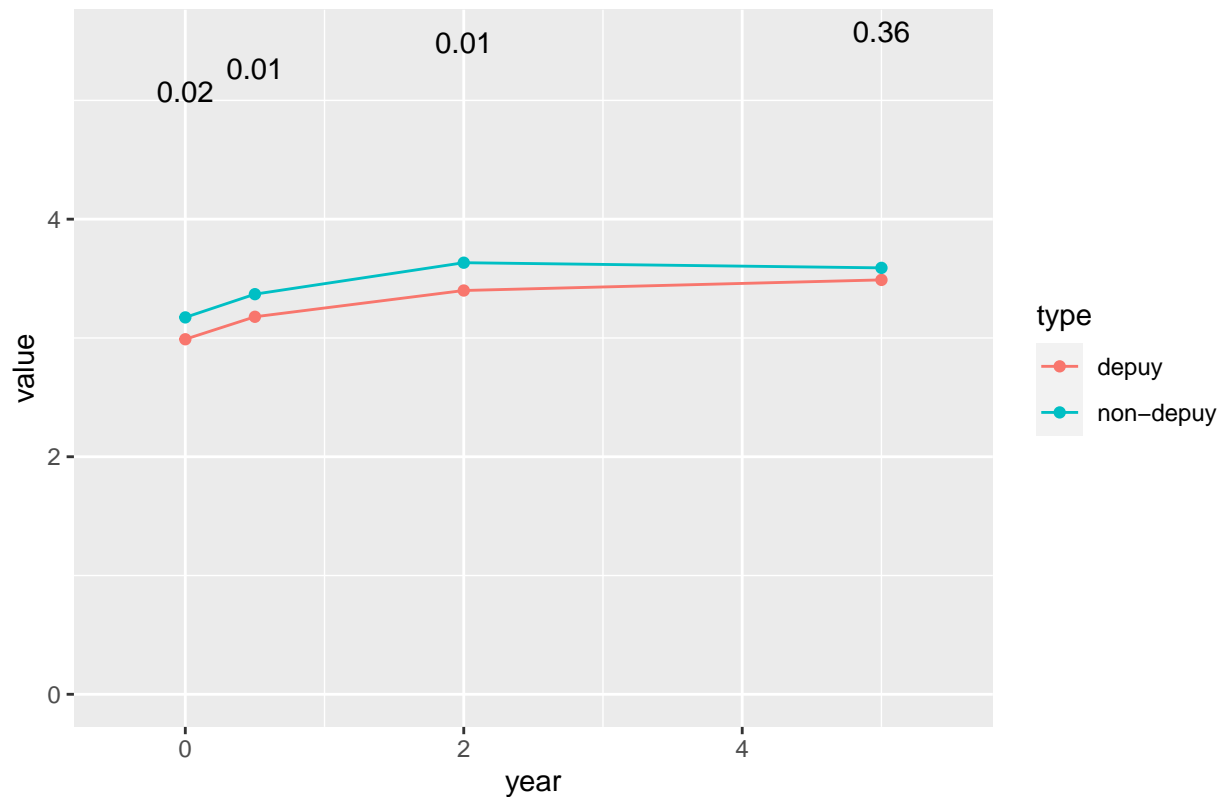
6m vs 5y p-value

0.0002136056

2y vs 5y p-value

0.9676347

## SRS22 – Function / Activity\_First Visit



### SRS22 - Pain\_First Visit

```
[1] "stats"
      type      mean      sd    N
1: non-deputy 2.766389 0.9804953 216
2:      deputy 2.500484 0.9443429 248
[1] "p_val"
[1] 0.003195792
```

### 6M. SRS22 - Pain

```
[1] "stats"
      type      mean      sd    N
1: non-deputy 3.567179 0.8188499 195
2:      deputy 3.351446 0.9539992 242
[1] "p_val"
[1] 0.01135149
```

### 6M. SRS22 - Pain\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-deputy 0.8072340 0.9682720 188
2:      deputy 0.8693939 0.9626357 231
[1] "p_val"
[1] 0.5126672
```

2Y. SRS22 - Pain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 3.600878 1.064697 205
2:      depuy 3.410976 1.095548 246
[1] "p_val"
[1] 0.0633601
```

2Y. SRS22 - Pain\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 0.8458852 0.9393857 209
2:      depuy 0.9045492 0.9702417 244
[1] "p_val"
[1] 0.514341
```

5Y. SRS22 - Pain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 3.459752 1.152435 121
2:      depuy 3.352528 1.118858 178
[1] "p_val"
[1] 0.4250394
```

5Y. SRS22 - Pain\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 0.8021138 1.000172 123
2:      depuy 0.8218436 1.056407 179
[1] "p_val"
[1] 0.869381
```

SRS22 - Pain\_First Visit tests

preop vs 6m p-value

1.537316e-36

6m vs 2y p-value

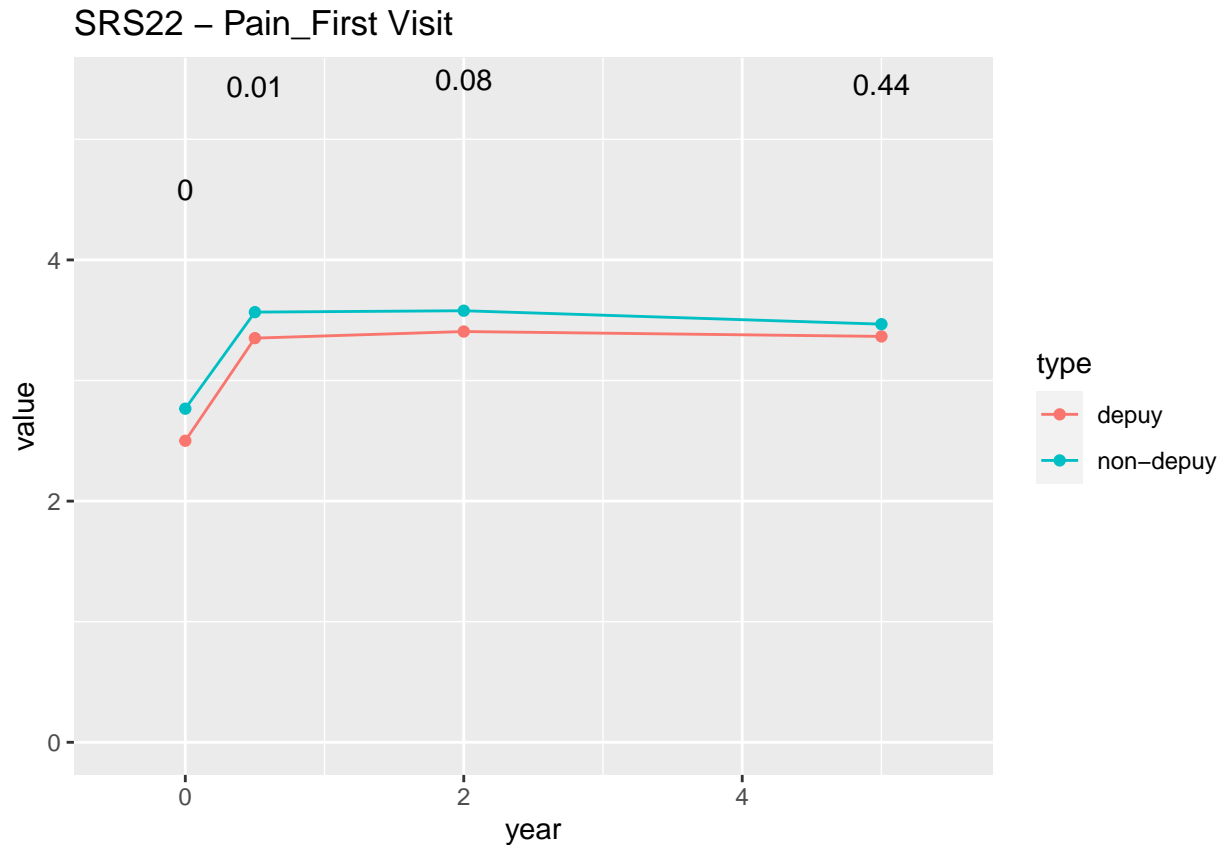
0.4584437

6m vs 5y p-value

0.5090881

2y vs 5y p-value

0.2225362



SRS22 – Self image / Appearance\_First Visit

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 2.356898 0.7373807 216
2:      depuy 2.411008 0.7305919 248
[1] "p_val"
[1] 0.428867
```

6M. SRS22 – Self image / Appearance

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 3.601282 0.7583799 195
2:      depuy 3.436322 0.8471922 242
[1] "p_val"
[1] 0.03252696
```

6M. SRS22 – Self image / Appearance\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 1.242872 0.9224220 188
2:      depuy 1.053723 0.9320524 231
[1] "p_val"
[1] 0.03835653
```

```

2Y. SRS22 - Self image / Appearance
[1] "stats"
      type      mean      sd    N
1: non-depuy 3.622049 0.9025909 205
2:      depuy 3.343496 0.9283068 246
[1] "p_val"
[1] 0.001370755

```

```

2Y. SRS22 - Self image / Appearance_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy 1.2546890 0.9487786 209
2:      depuy 0.9334836 0.9588817 244
[1] "p_val"
[1] 0.000389729

```

```

5Y. SRS22 - Self image / Appearance
[1] "stats"
      type      mean      sd    N
1: non-depuy 3.480579 0.9786337 121
2:      depuy 3.315449 0.9462833 178
[1] "p_val"
[1] 0.1479368

```

```

5Y. SRS22 - Self image / Appearance_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy 1.1124390 0.9203655 123
2:      depuy 0.9255307 0.9264109 179
[1] "p_val"
[1] 0.08491884

```

```

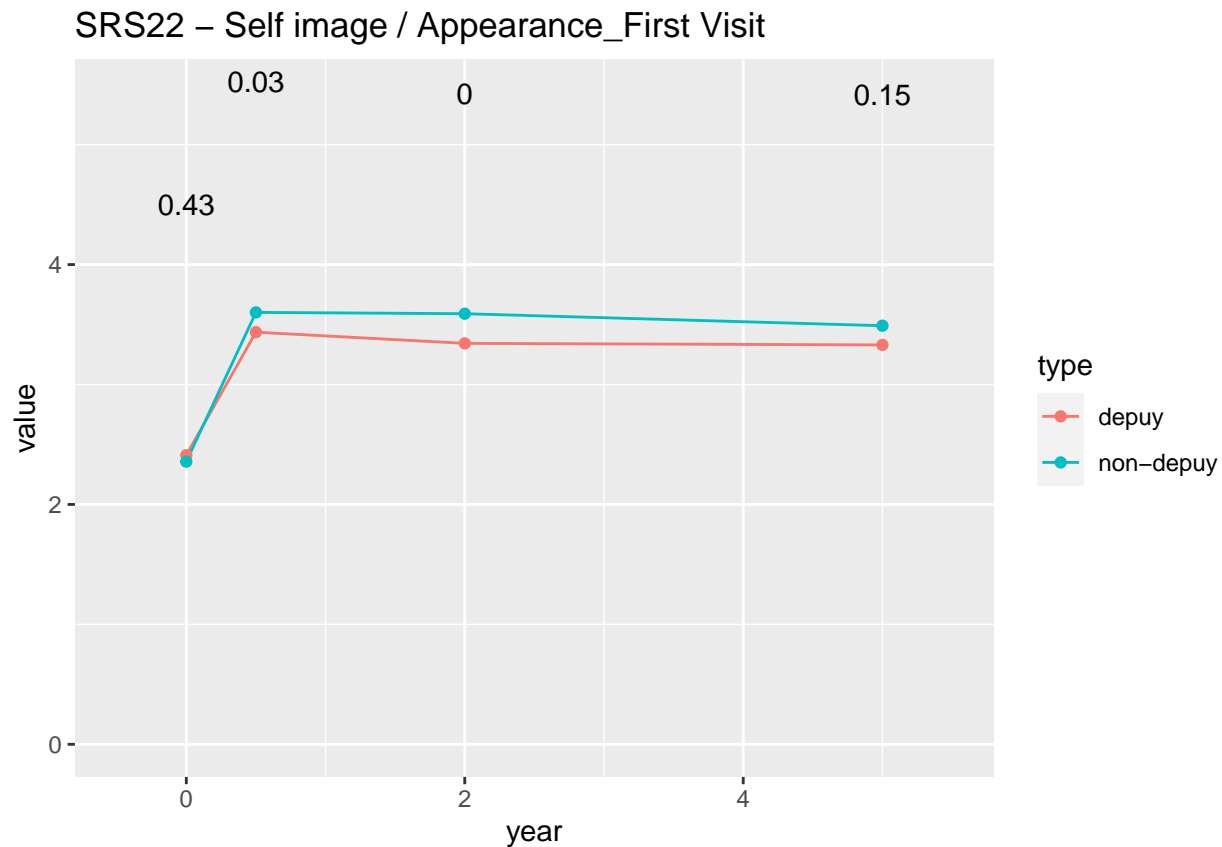
SRS22 - Self image / Appearance_First Visit tests
preop vs 6m p-value
2.775625e-84
6m vs 2y p-value
0.4955252

```

```

6m vs 5y p-value
0.06030789
2y vs 5y p-value
0.2142941

```



SRS22 - Mental health\_First Visit

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 3.088194 0.8663003 216
2:      depuy 3.145081 0.8475528 248
[1] "p_val"
[1] 0.4764035
```

6M. SRS22 - Mental health

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 3.538974 0.7871513 195
2:      depuy 3.500868 0.8786191 242
[1] "p_val"
[1] 0.633214
```

6M. SRS22 - Mental health\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 0.4247340 0.8014275 188
2:      depuy 0.3654978 0.8244232 231
[1] "p_val"
[1] 0.458003
```

2Y. SRS22 - Mental health

[1] "stats"

|    | type      | mean     | sd        | N   |
|----|-----------|----------|-----------|-----|
| 1: | non-depuy | 3.533024 | 0.8490633 | 205 |
| 2: | depuy     | 3.497764 | 1.0041674 | 246 |

[1] "p\_val"

[1] 0.6863707

2Y. SRS22 - Mental health\_gain

[1] "stats"

|    | type      | mean      | sd        | N   |
|----|-----------|-----------|-----------|-----|
| 1: | non-depuy | 0.4273684 | 0.8519459 | 209 |
| 2: | depuy     | 0.3666803 | 0.8229277 | 244 |

[1] "p\_val"

[1] 0.4430467

5Y. SRS22 - Mental health

[1] "stats"

|    | type      | mean     | sd        | N   |
|----|-----------|----------|-----------|-----|
| 1: | non-depuy | 3.574793 | 0.9356398 | 121 |
| 2: | depuy     | 3.460955 | 0.9133694 | 178 |

[1] "p\_val"

[1] 0.2981234

5Y. SRS22 - Mental health\_gain

[1] "stats"

|    | type      | mean      | sd        | N   |
|----|-----------|-----------|-----------|-----|
| 1: | non-depuy | 0.4528455 | 0.8067162 | 123 |
| 2: | depuy     | 0.2797207 | 0.8504172 | 179 |

[1] "p\_val"

[1] 0.07421403

SRS22 - Mental health\_First Visit tests

preop vs 6m p-value

3.055862e-12

6m vs 2y p-value

0.9454234

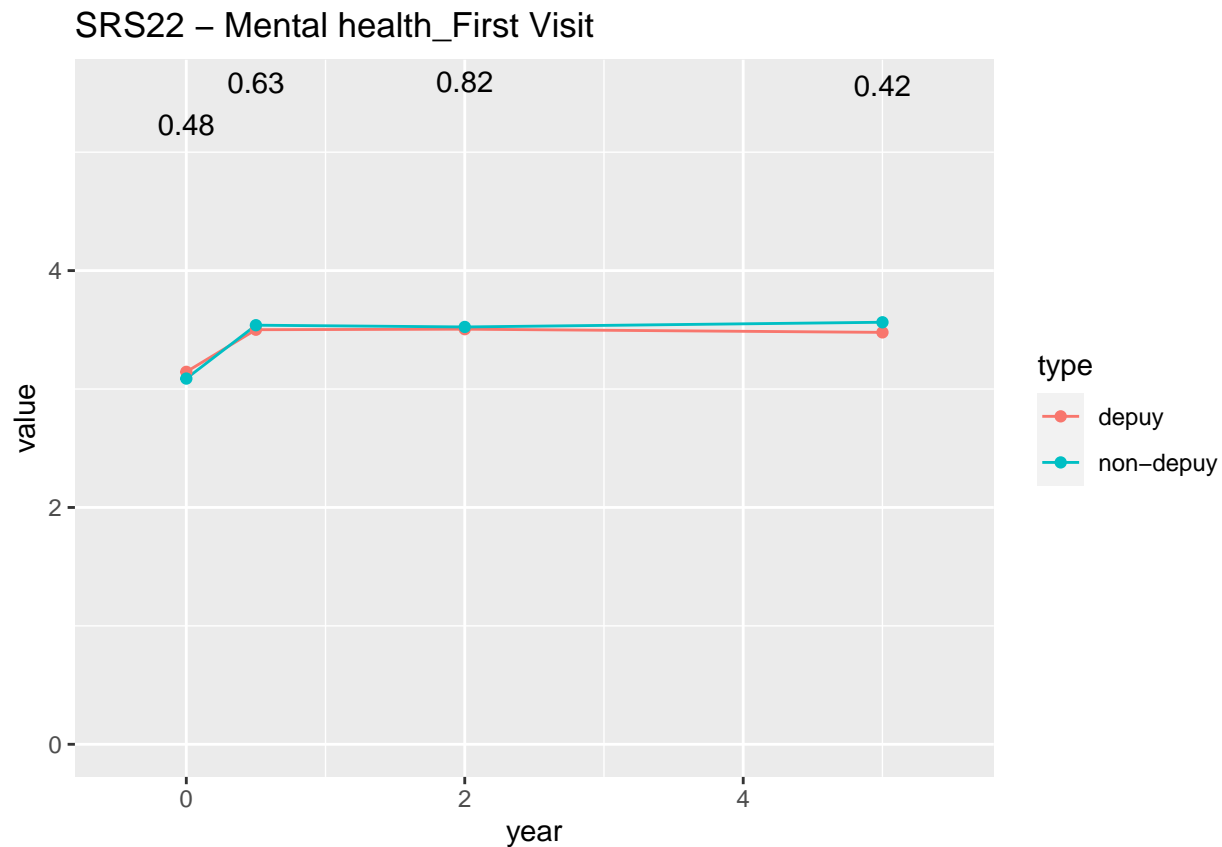
6m vs 5y p-value

0.8709381

2y vs 5y p-value

0.9221221





SRS22 - SRS Subtotal score\_First Visit

```
[1] "stats"
      type      mean      sd    N
1: non-deploy 2.850139 0.7138565 216
2:      deploy 2.766613 0.6706537 248
[1] "p_val"
[1] 0.1966754
```

6M. SRS22 - SRS Subtotal score

```
[1] "stats"
      type      mean      sd    N
1: non-deploy 3.519385 0.6184014 195
2:      deploy 3.368264 0.7197875 242
[1] "p_val"
[1] 0.01874133
```

6M. SRS22 - SRS Subtotal score\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-deploy 0.6621809 0.6446514 188
2:      deploy 0.6181818 0.6399098 231
[1] "p_val"
[1] 0.4861126
```

2Y. SRS22 - SRS Subtotal score

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 3.602000 0.7933729 205
2:      depuy 3.411504 0.8714823 246
[1] "p_val"
[1] 0.01559511
```

2Y. SRS22 - SRS Subtotal score\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 0.7466507 0.6681010 209
2:      depuy 0.6437295 0.6722204 244
[1] "p_val"
[1] 0.1038482
```

5Y. SRS22 - SRS Subtotal score

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 3.523058 0.8845581 121
2:      depuy 3.378380 0.8831456 179
[1] "p_val"
[1] 0.1655361
```

5Y. SRS22 - SRS Subtotal score\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 0.6961789 0.6890770 123
2:      depuy 0.5925556 0.7530817 180
[1] "p_val"
[1] 0.2169307
```

SRS22 - SRS Subtotal score\_First Visit tests

preop vs 6m p-value

2.238438e-39

6m vs 2y p-value

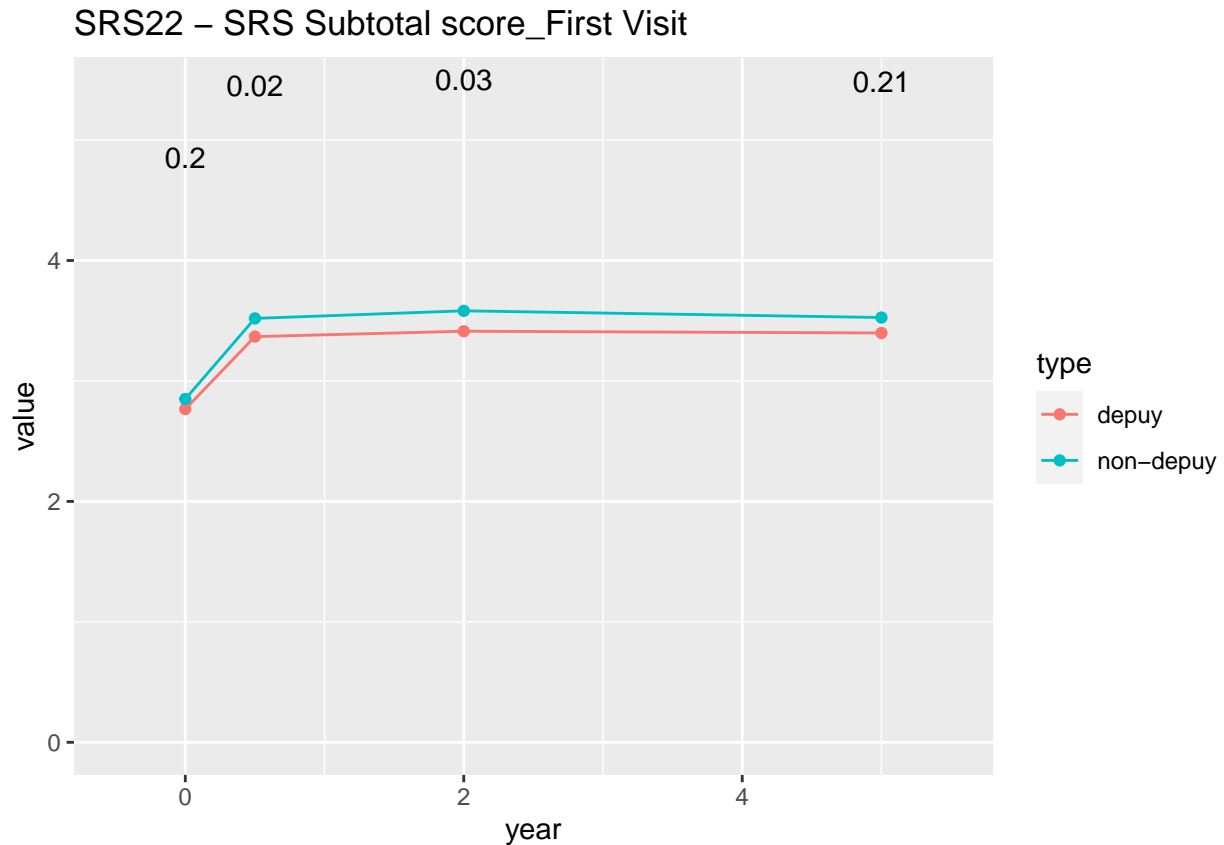
0.2238158

6m vs 5y p-value

0.9863684

2y vs 5y p-value

0.3430075



SRS22 - Satisfaction with management\_First Visit

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 2.909091 1.030199  44
2:      depuy 3.161585 1.078137 164
[1] "p_val"
[1] 0.1573486
```

6M. SRS22 - Satisfaction with management

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 4.296296 0.7628593 189
2:      depuy 4.225738 0.8905649 237
[1] "p_val"
[1] 0.3792426
```

6M. SRS22 - Satisfaction with management\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 1.320513 1.248616  39
2:      depuy 1.113333 1.338820 150
[1] "p_val"
[1] 0.3667283
```

2Y. SRS22 - Satisfaction with management

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 4.31250 0.8349127 200
2:      depuy 4.07438 1.0538630 242
[1] "p_val"
[1] 0.008341939
```

2Y. SRS22 - Satisfaction with management\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 1.162791 1.261711  43
2:      depuy 0.853125 1.348884 160
[1] "p_val"
[1] 0.1636524
```

5Y. SRS22 - Satisfaction with management

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 4.070833 0.9815436 120
2:      depuy 3.946328 1.0383009 177
[1] "p_val"
[1] 0.295682
```

5Y. SRS22 - Satisfaction with management\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 1.2272727 1.231684  33
2:      depuy 0.7982456 1.229647 114
[1] "p_val"
[1] 0.08382509
```

SRS22 - Satisfaction with management\_First Visit tests

preop vs 6m p-value

9.057928e-34

6m vs 2y p-value

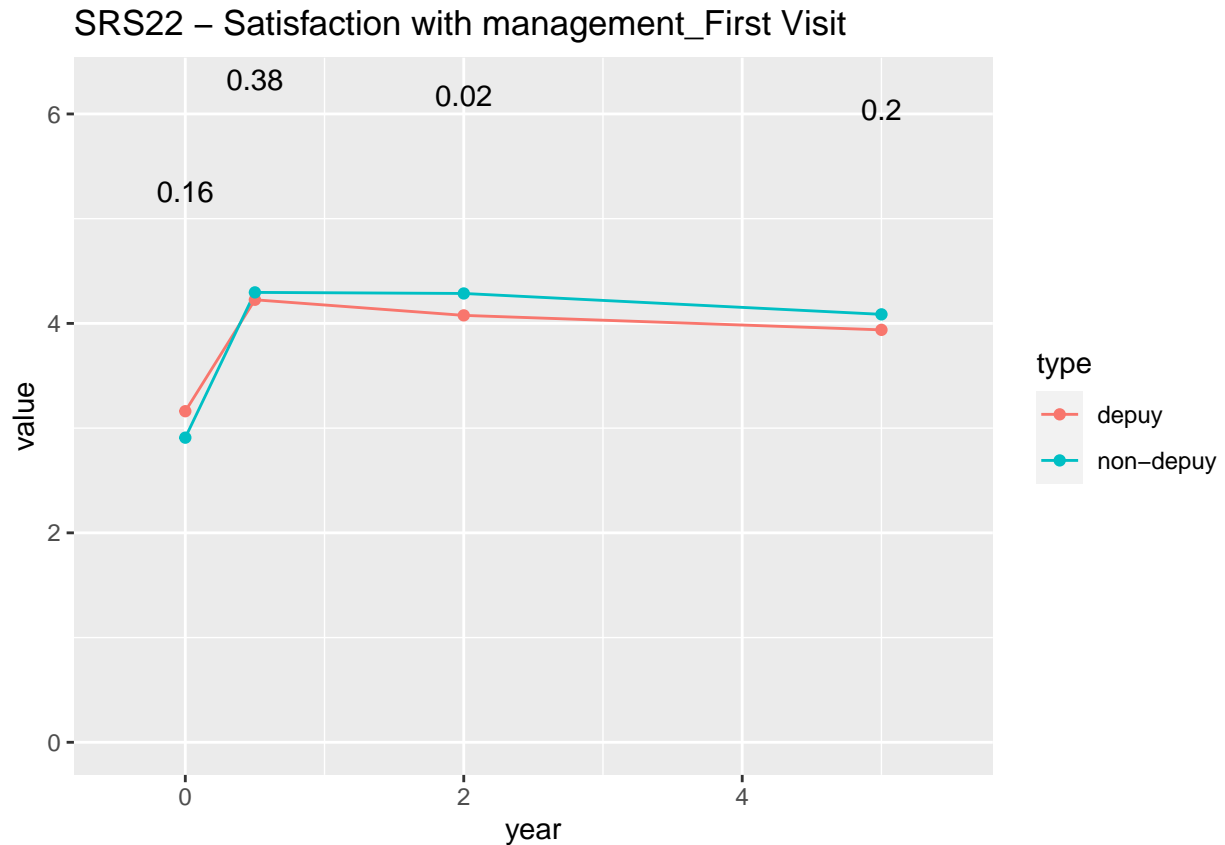
0.2220012

6m vs 5y p-value

0.0002972714

2y vs 5y p-value

0.01338316



SF36 - PCS\_First Visit

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 37.91383 8.812595 206
2:      depuy 34.96494 9.329975 247
[1] "p_val"
[1] 0.0006080046
```

6M. SF36 - PCS

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 41.54760 8.202602 183
2:      depuy 39.63639 9.127802 241
[1] "p_val"
[1] 0.02416974
```

6M. SF36 - PCS\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-depuy 3.920294 9.224947 170
2:      depuy 4.737652 8.809461 230
[1] "p_val"
[1] 0.3725316
```

```

2Y. SF36 - PCS
[1] "stats"
      type      mean      sd    N
1: non-depuy 42.91207 10.21067 198
2:      depuy 41.34494 10.37093 244
[1] "p_val"
[1] 0.1118262

```

```

2Y. SF36 - PCS_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy 4.943897 9.317694 195
2:      depuy 6.280523 9.493081 239
[1] "p_val"
[1] 0.1412359

```

```

5Y. SF36 - PCS
[1] "stats"
      type      mean      sd    N
1: non-depuy 42.84547 11.13025 117
2:      depuy 41.09875 11.22210 176
[1] "p_val"
[1] 0.1909597

```

```

5Y. SF36 - PCS_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy 5.355487 10.25777 113
2:      depuy 5.834261 10.14046 176
[1] "p_val"
[1] 0.6976818

```

```

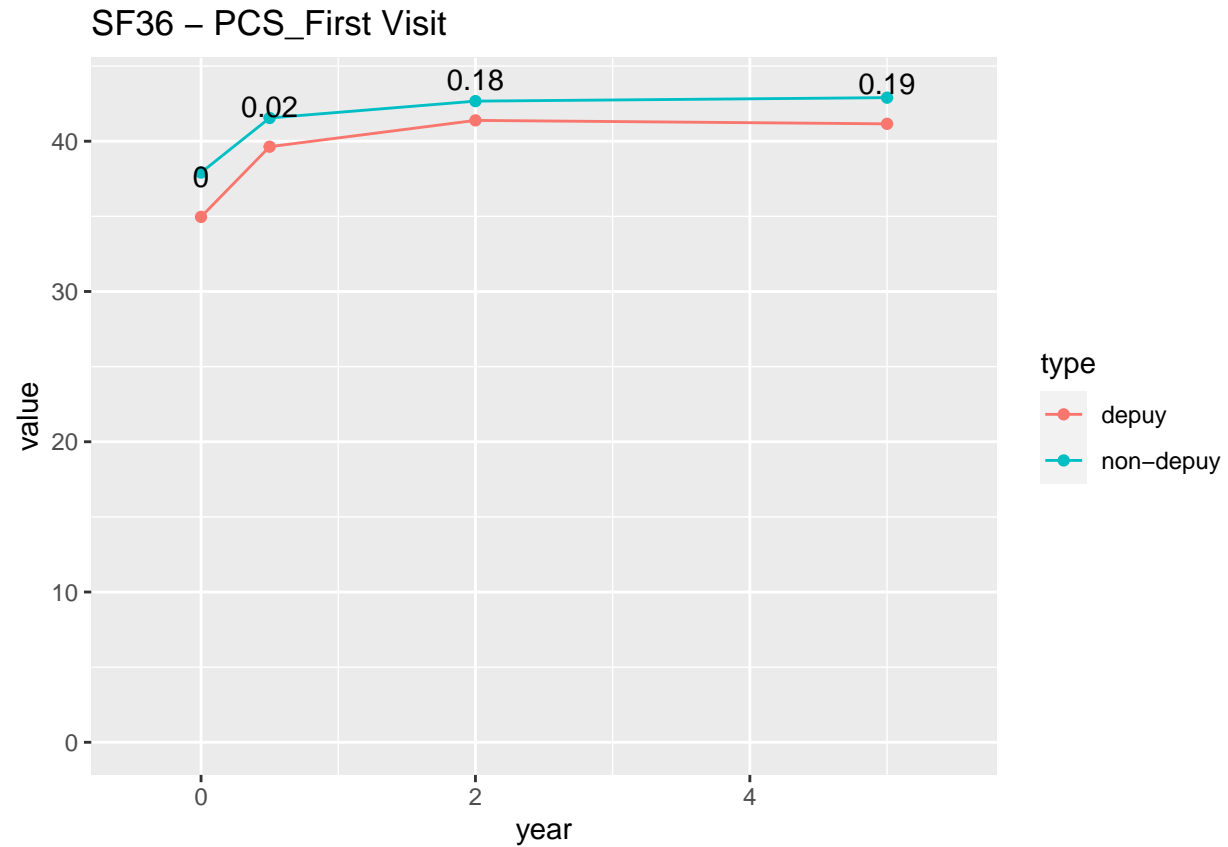
SF36 - PCS_First Visit tests
preop vs 6m p-value
1.480501e-11
6m vs 2y p-value
0.01493572

```

```

6m vs 5y p-value
0.08797887
2y vs 5y p-value
0.7592978

```



SF36 – MCS\_First Visit

```
[1] "stats"
      type      mean      sd    N
1: non-deploy 41.27311 11.60587 206
2:      deploy 43.60664 12.08924 247
[1] "p_val"
[1] 0.03710838
```

6M. SF36 – MCS

```
[1] "stats"
      type      mean      sd    N
1: non-deploy 45.60858 11.24779 183
2:      deploy 47.42515 12.48295 241
[1] "p_val"
[1] 0.1170693
```

6M. SF36 – MCS\_gain

```
[1] "stats"
      type      mean      sd    N
1: non-deploy 4.407353 11.81858 170
2:      deploy 3.608043 11.40459 230
[1] "p_val"
[1] 0.4977905
```

```

2Y. SF36 - MCS
[1] "stats"
      type      mean      sd    N
1: non-depuy 46.63308 11.12454 198
2:      depuy 47.17889 12.97837 244
[1] "p_val"
[1] 0.6343806

```

```

2Y. SF36 - MCS_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy 5.177179 12.24835 195
2:      depuy 3.408947 11.46844 239
[1] "p_val"
[1] 0.1245289

```

```

5Y. SF36 - MCS
[1] "stats"
      type      mean      sd    N
1: non-depuy 47.14385 12.27181 117
2:      depuy 47.18932 11.31031 177
[1] "p_val"
[1] 0.9744379

```

```

5Y. SF36 - MCS_gain
[1] "stats"
      type      mean      sd    N
1: non-depuy 5.277699 13.12295 113
2:      depuy 3.012260 11.25216 177
[1] "p_val"
[1] 0.1315421

```

```

SF36 - MCS_First Visit tests
preop vs 6m p-value
4.829761e-07
6m vs 2y p-value
0.7210139

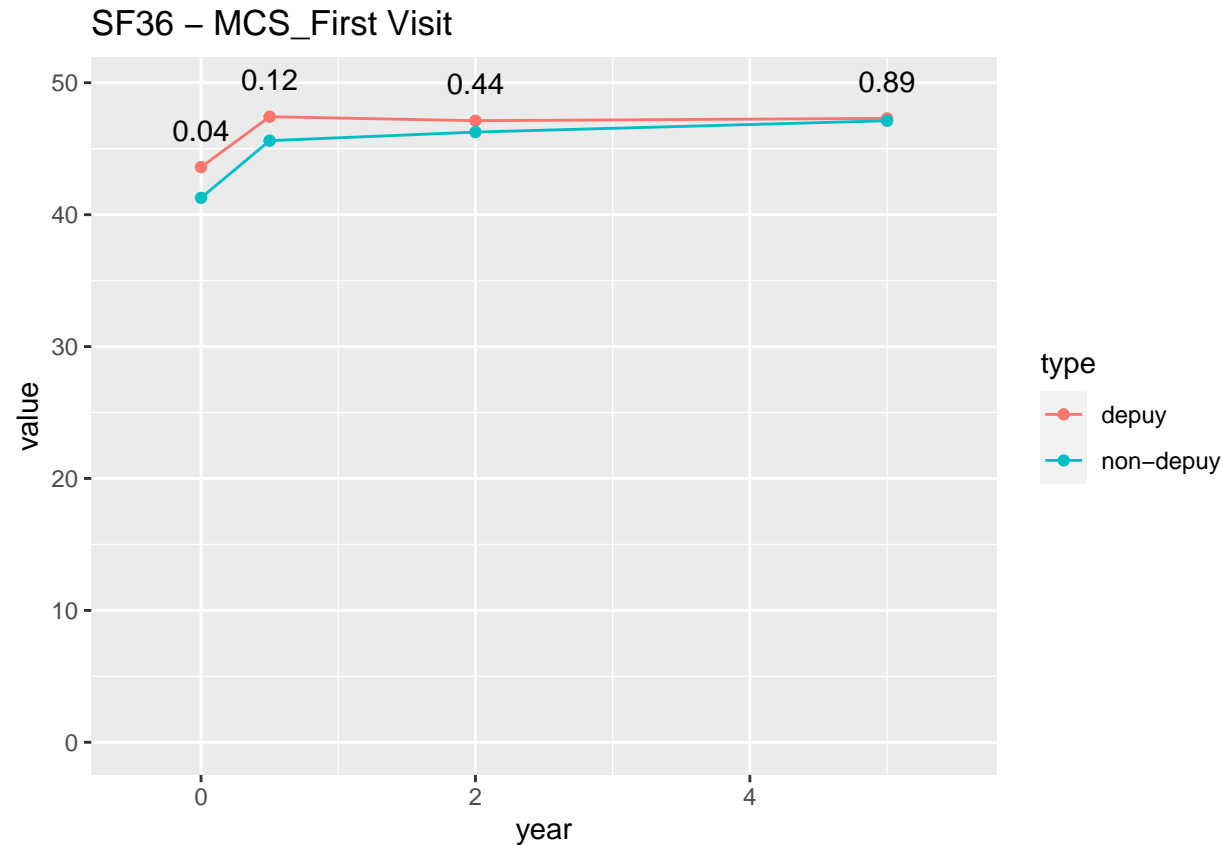
```

```

6m vs 5y p-value
0.5543343
2y vs 5y p-value
0.7911747

```





### Surgery

Total Operative Blood Loss st1+st2+st3

```
[1] "stats"
      type    mean      sd    N
1: non-depuy 1359.333 1027.07 171
2:      depuy 1528.104 1267.89 260
[1] "p_val"
[1] 0.1296417
```

Total surgical time

```
[1] "stats"
      type    mean      sd    N
1: non-depuy 297.3750 188.5819 224
2:      depuy 340.7375 159.4847 259
[1] "p_val"
[1] 0.007095454
```

Number of Posterior Instrumented Levels

```
[1] "stats"
      type    mean      sd    N
1: non-depuy 11.182222 3.706611 225
2:      depuy  8.334615 3.787751 260
```

```
[1] "p_val"
[1] 7.388638e-16
```

```
Pelvic fixation
[1] "table_deputy"
```

```
No Yes
154 106
[1] "proportion_deputy"
```

```
No Yes
0.5923077 0.4076923
[1] "table_nondeputy"
```

```
No Yes
130 95
[1] "proportion_nondeputy"
```

```
No Yes
0.5777778 0.4222222
[1] "p_val_No"
[1] 0.7726174
[1] "p_val_NA"
[1] NaN
[1] "p_val_Yes"
[1] 0.8490206
```

```
Surgical Approach
[1] "table_deputy"
```

```
Anterior-Posterior      Posterior Posterior-Anterior
              5              250              5
[1] "proportion_deputy"
```

```
Anterior-Posterior      Posterior Posterior-Anterior
      0.01923077      0.96153846      0.01923077
[1] "table_nondeputy"
< table of extent 0 >
[1] "proportion_nondeputy"
numeric(0)
[1] "p_val_NA"
[1] NaN
[1] "p_val_Posterior"
[1] 1.724689e-98
[1] "p_val_Anterior-Posterior"
[1] 0.09998745
[1] "p_val_Posterior-Anterior"
[1] 0.09998745
```

```
Number of Interbody Fusions
[1] "stats"
```

|    | type      | mean     | sd        | N   |
|----|-----------|----------|-----------|-----|
| 1: | non-depuy | 1.605263 | 0.8653161 | 76  |
| 2: | depuy     | 1.084615 | 1.3124566 | 260 |

[1] "p\_val"

[1] 7.344185e-05

#### Decompression

[1] "table\_depuy"

| No  | Yes |
|-----|-----|
| 173 | 87  |

[1] "proportion\_depuy"

| No        | Yes       |
|-----------|-----------|
| 0.6653846 | 0.3346154 |

[1] "table\_nondepuy"

| No  | Yes |
|-----|-----|
| 191 | 35  |

[1] "proportion\_nondepuy"

| No        | Yes       |
|-----------|-----------|
| 0.8451327 | 0.1548673 |

[1] "p\_val\_No"

[1] 8.455121e-06

[1] "p\_val\_Yes"

[1] 8.455121e-06

#### Interbody Fusion

[1] "table\_depuy"

| No  | Yes |
|-----|-----|
| 121 | 139 |

[1] "proportion\_depuy"

| No        | Yes       |
|-----------|-----------|
| 0.4653846 | 0.5346154 |

[1] "table\_nondepuy"

| No  | Yes |
|-----|-----|
| 150 | 76  |

[1] "proportion\_nondepuy"

| No        | Yes       |
|-----------|-----------|
| 0.6637168 | 0.3362832 |

[1] "p\_val\_No"

[1] 1.713436e-05

[1] "p\_val\_Yes"

[1] 1.713436e-05

#### Osteotomy

```

[1] "table_depuy"

      No      Yes
121 139
[1] "proportion_depuy"

      No      Yes
0.4653846 0.5346154
[1] "table_nondepuy"

      No      Yes
123 103
[1] "proportion_nondepuy"

      No      Yes
0.5442478 0.4557522
[1] "p_val_No"
[1] 0.1003043
[1] "p_val_Yes"
[1] 0.1003043


3C0
[1] "table_depuy"

FALSE TRUE
 219   41
[1] "proportion_depuy"

      FALSE      TRUE
0.8423077 0.1576923
[1] "table_nondepuy"

FALSE TRUE
 128   97
[1] "proportion_nondepuy"

      FALSE      TRUE
0.5688889 0.4311111
[1] "p_val_FALSE"
[1] 3.751119e-11
[1] "p_val_TRUE"
[1] 7.027708e-11
[1] "p_val_NA"
[1] NaN


uiv_t10_12_l1
[1] "table_depuy"

      No      Yes
233  27
[1] "proportion_depuy"

```

```
      No      Yes
0.8961538 0.1038462
[1] "table_nondepuy"
```

```
      No Yes
217    9
[1] "proportion_nondepuy"
```

```
      No      Yes
0.96017699 0.03982301
[1] "p_val_No"
[1] 0.0119226
[1] "p_val_Yes"
[1] 0.0119226
```