Clusters Descriptives

```
$vars
 [1] "Weight (kgs)_First Visit"        "Age"
 [3] "Sagittal Balance"                "Coronal Balance (C7PL to CSVL)"
 [5] "Static Major curve Cobb angle"   "Pelvic Tilt"
 [7] "ODI - Score (%)"                 "SRS22 - Function / Activity"
 [9] "SRS22 - Mental health"           "SRS22 - Pain"
[11] "SRS22 - Self image / Appearance" "SRS22 - SRS Subtotal score"
```
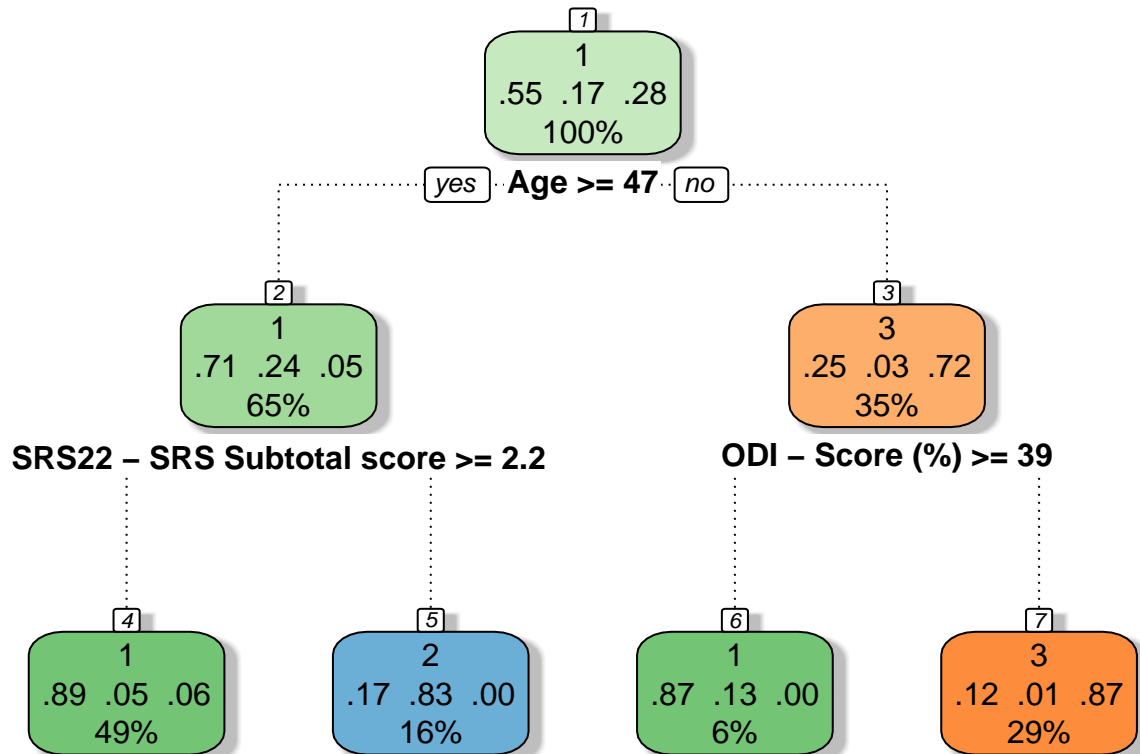
Initial Patients: 372

Number of patients

```
    cluster   N
1:        1 205
2:        2  63
3:        3 104
```

```
                        ┌─────────┐
                        │    1    │ 1
                        │ 1       │
                        │.55 .17 .28│
                        │  100%   │
                        └─────────┘
                   yes ─ Age >= 47 ─ no
        ┌─────────┐                    ┌─────────┐
        │    1    │ 2                  │    3    │ 3
        │.71 .24 .05│                  │.25 .03 .72│
        │  65%    │                    │  35%    │
        └─────────┘                    └─────────┘
  SRS22 – SRS Subtotal score >= 2.2        ODI – Score (%) >= 39
┌─────────┐   ┌─────────┐      ┌─────────┐   ┌─────────┐
│    1    │4  │    2    │5     │    1    │6  │    3    │7
│.89 .05 .06│ │.17 .83 .00│   │.87 .13 .00│ │.12 .01 .87│
│  49%    │   │  16%    │      │   6%    │   │  29%    │
└─────────┘   └─────────┘      └─────────┘   └─────────┘
```

Rattle 2022–Jan–24 17:55:24 aleixrvr

Demographics

variable	All.mean	All.sd	1.mean	1.sd
Age	Age	52.42	19.39	60.46	14.87
Height (cm)_First Visit	Height (cm)_First Visit	163.08	9.41	162.49	8.29
Weight (kgs)_First Visit	Weight (kgs)_First Visit	65.62	13.01	65.10	11.64
BMI_First Visit	BMI_First Visit	24.69	4.57	24.66	4.15

	2.mean	2.sd	3.mean	3.sd	p.val_1.2	p.val_1.3
Age	63.22	10.37	30.03	12.07	0.1000	0.0000
Height (cm)_First Visit	161.35	10.24	165.28	10.59	0.4221	0.0202
Weight (kgs)_First Visit	72.59	11.91	62.41	14.67	0.0000	0.1051
BMI_First Visit	27.98	4.61	22.75	4.25	0.0000	0.0002

	p.val_1.all	p.val_2.3	p.val_2.all	p.val_all
Age	0.0000	0.0000	0.0000	0.0000
Height (cm)_First Visit	0.4387	0.0191	0.2137	0.0131
Weight (kgs)_First Visit	0.6263	0.0000	0.0001	0.0000
BMI_First Visit	0.9446	0.0000	0.0000	0.0000

```
$Gender
$Gender$All
$Gender$All$table
variable
Female    Male
   291      81


$Gender$All$proportion
variable
    Female        Male
0.7822581 0.2177419



$Gender$`1`
$Gender$`1`$table
variable
Female    Male
   168      37

$Gender$`1`$proportion
variable
    Female        Male
0.8195122 0.1804878


$Gender$`2`
$Gender$`2`$table
variable
Female    Male
    49      14

$Gender$`2`$proportion
variable
    Female        Male
0.7777778 0.2222222
```

```
$Gender$'3'
$Gender$'3'$table
variable
Female   Male
    74     30

$Gender$'3'$proportion
variable
   Female      Male
0.7115385 0.2884615




$'Prior Spine Surgery'
$'Prior Spine Surgery'$All
$'Prior Spine Surgery'$All$table
variable
 No Yes
255 117

$'Prior Spine Surgery'$All$proportion
variable
        No       Yes
0.6854839 0.3145161


$'Prior Spine Surgery'$'1'
$'Prior Spine Surgery'$'1'$table
variable
 No Yes
139  66

$'Prior Spine Surgery'$'1'$proportion
variable
        No       Yes
0.6780488 0.3219512


$'Prior Spine Surgery'$'2'
$'Prior Spine Surgery'$'2'$table
variable
 No Yes
 29  34

$'Prior Spine Surgery'$'2'$proportion
variable
        No       Yes
0.4603175 0.5396825


$'Prior Spine Surgery'$'3'
$'Prior Spine Surgery'$'3'$table
variable
```

```
 No Yes
 87  17


$'Prior Spine Surgery'$'3'$proportion
variable
        No       Yes
0.8365385 0.1634615




$'ASA classification'
$'ASA classification'$All
$'ASA classification'$All$table
variable
  1   2   3
112 203  57

$'ASA classification'$All$proportion
variable
        1         2         3
0.3010753 0.5456989 0.1532258


$'ASA classification'$'1'
$'ASA classification'$'1'$table
variable
  1   2   3
 39 129  37

$'ASA classification'$'1'$proportion
variable
        1         2         3
0.1902439 0.6292683 0.1804878


$'ASA classification'$'2'
$'ASA classification'$'2'$table
variable
 1  2  3
 7 40 16

$'ASA classification'$'2'$proportion
variable
        1         2         3
0.1111111 0.6349206 0.2539683


$'ASA classification'$'3'
$'ASA classification'$'3'$table
variable
 1  2  3
66 34  4

$'ASA classification'$'3'$proportion
```

```
variable
         1          2          3
0.63461538 0.32692308 0.03846154



$`Tobacco use_First Visit`
$`Tobacco use_First Visit`$All
$`Tobacco use_First Visit`$All$table
variable
 Current        Ex Non-User
     74         67        231

$`Tobacco use_First Visit`$All$proportion
variable
  Current        Ex  Non-User
0.1989247 0.1801075 0.6209677


$`Tobacco use_First Visit`$`1`
$`Tobacco use_First Visit`$`1`$table
variable
 Current        Ex Non-User
     40         43        122

$`Tobacco use_First Visit`$`1`$proportion
variable
  Current        Ex  Non-User
0.1951220 0.2097561 0.5951220


$`Tobacco use_First Visit`$`2`
$`Tobacco use_First Visit`$`2`$table
variable
 Current        Ex Non-User
     14         7         42

$`Tobacco use_First Visit`$`2`$proportion
variable
  Current        Ex  Non-User
0.2222222 0.1111111 0.6666667


$`Tobacco use_First Visit`$`3`
$`Tobacco use_First Visit`$`3`$table
variable
 Current        Ex Non-User
     20         17         67

$`Tobacco use_First Visit`$`3`$proportion
variable
  Current        Ex  Non-User
0.1923077 0.1634615 0.6442308
```

```
$‘ESSG Diagnosis‘
$‘ESSG Diagnosis‘$All
$‘ESSG Diagnosis‘$All$table
variable
                   Congenital                  Degenerative
                           10                           132
                  Failed-back                    Idiopathic
                           20                           166
                Neuromuscular Other: Ankylosing spondylitis
                            5                             1
          Other: hyperkyphosis   Other: radiotherapy induced
                            1                             1
       Other: spondylolisthesis                Post-traumatic
                            1                            15
                  Scheuermann                     Syndromic
                           15                             5


$‘ESSG Diagnosis‘$All$proportion
variable
                   Congenital                  Degenerative
                  0.026881720                   0.354838710
                  Failed-back                    Idiopathic
                  0.053763441                   0.446236559
                Neuromuscular Other: Ankylosing spondylitis
                  0.013440860                   0.002688172
          Other: hyperkyphosis   Other: radiotherapy induced
                  0.002688172                   0.002688172
       Other: spondylolisthesis                Post-traumatic
                  0.002688172                   0.040322581
                  Scheuermann                     Syndromic
                  0.040322581                   0.013440860


$‘ESSG Diagnosis‘$‘1‘
$‘ESSG Diagnosis‘$‘1‘$table
variable
                   Congenital                  Degenerative
                            1                            96
                  Failed-back                    Idiopathic
                           12                            78
                Neuromuscular Other: Ankylosing spondylitis
                            2                             1
          Other: hyperkyphosis    Other: spondylolisthesis
                            1                             1
                Post-traumatic                   Scheuermann
                            7                             4
                    Syndromic
                            2


$‘ESSG Diagnosis‘$‘1‘$proportion
variable
                   Congenital                  Degenerative
```

```
                    0.004878049                       0.468292683
                    Failed-back                         Idiopathic
                    0.058536585                       0.380487805
              Neuromuscular Other: Ankylosing spondylitis
                    0.009756098                       0.004878049
          Other: hyperkyphosis      Other: spondylolisthesis
                    0.004878049                       0.004878049
                 Post-traumatic                       Scheuermann
                    0.034146341                       0.019512195
                       Syndromic
                    0.009756098


$‘ESSG Diagnosis‘$‘2‘
$‘ESSG Diagnosis‘$‘2‘$table
variable
     Congenital    Degenerative     Failed-back      Idiopathic  Neuromuscular
             2              35               7              10              2
Post-traumatic     Scheuermann
             6               1

$‘ESSG Diagnosis‘$‘2‘$proportion
variable
     Congenital    Degenerative     Failed-back      Idiopathic  Neuromuscular
    0.03174603      0.55555556      0.11111111      0.15873016     0.03174603
Post-traumatic     Scheuermann
    0.09523810      0.01587302


$‘ESSG Diagnosis‘$‘3‘
$‘ESSG Diagnosis‘$‘3‘$table
variable
                  Congenital                     Degenerative
                           7                                1
                 Failed-back                       Idiopathic
                           1                               78
            Neuromuscular Other: radiotherapy induced
                           1                                1
              Post-traumatic                     Scheuermann
                           2                               10
                   Syndromic
                           3

$‘ESSG Diagnosis‘$‘3‘$proportion
variable
                  Congenital                     Degenerative
                 0.067307692                      0.009615385
                 Failed-back                       Idiopathic
                 0.009615385                      0.750000000
            Neuromuscular Other: radiotherapy induced
                 0.009615385                      0.009615385
              Post-traumatic                     Scheuermann
                 0.019230769                      0.096153846
                   Syndromic
```

```
                                              0.028846154




$`Surgical Approach`
$`Surgical Approach`$All
$`Surgical Approach`$All$table
variable
                     Anterior             Anterior-Posterior
                            1                              4
                    Posterior             Posterior-Anterior
                          352                             11
          Posterior-Posterior Posterior-Posterior-Anterior
                            3                              1


$`Surgical Approach`$All$proportion
variable
                     Anterior             Anterior-Posterior
                  0.002688172                    0.010752688
                    Posterior             Posterior-Anterior
                  0.946236559                    0.029569892
          Posterior-Posterior Posterior-Posterior-Anterior
                  0.008064516                    0.002688172




$`Surgical Approach`$`1`
$`Surgical Approach`$`1`$table
variable
             Anterior   Anterior-Posterior           Posterior  Posterior-Anterior
                    1                    2                 196                   4
Posterior-Posterior
                    2


$`Surgical Approach`$`1`$proportion
variable
             Anterior   Anterior-Posterior           Posterior  Posterior-Anterior
          0.004878049          0.009756098         0.956097561         0.019512195
Posterior-Posterior
          0.009756098




$`Surgical Approach`$`2`
$`Surgical Approach`$`2`$table
variable
         Posterior Posterior-Anterior
                56                  7


$`Surgical Approach`$`2`$proportion
variable
         Posterior Posterior-Anterior
         0.8888889          0.1111111




$`Surgical Approach`$`3`
```

8

```
$'Surgical Approach'$'3'$table
variable
          Anterior-Posterior                          Posterior
                         2                                 100
          Posterior-Posterior Posterior-Posterior-Anterior
                         1                                 1


$'Surgical Approach'$'3'$proportion
variable
          Anterior-Posterior                          Posterior
                 0.019230769                          0.961538462
          Posterior-Posterior Posterior-Posterior-Anterior
                 0.009615385                          0.009615385
```

Radiology

```
[1] "Static Major curve Cobb angle"


                                 All.mean All.sd 1.mean  1.sd 2.mean  2.sd
Static Major curve Cobb angle       42.46  21.33  37.88 17.91  31.68 20.00
6W. Static Major curve Cobb angle   23.00  16.25  21.64 14.66  15.42 11.56
6M. Static Major curve Cobb angle   23.05  17.22  20.44 14.66  17.86 14.98
1Y. Static Major curve Cobb angle   20.74  16.11  19.98 15.57  13.61 10.38
2Y. Static Major curve Cobb angle   22.52  17.11  20.61 15.01  16.39 13.18
5Y. Static Major curve Cobb angle   25.54  17.29  24.30 15.95  15.43  9.49
                                 3.mean  3.sd p.val_1.2 p.val_1.3 p.val_1.all
Static Major curve Cobb angle     58.24 20.02    0.0343    0.0000      0.0081
6W. Static Major curve Cobb angle 29.73 18.82    0.0021    0.0004      0.0081
6M. Static Major curve Cobb angle 30.82 20.23    0.2925    0.0000      0.0081
1Y. Static Major curve Cobb angle 26.41 17.98    0.0006    0.0039      0.0081
2Y. Static Major curve Cobb angle 29.50 20.24    0.0629    0.0006      0.0081
5Y. Static Major curve Cobb angle 35.48 19.38    0.0009    0.0031      0.0081
                                 p.val_2.3 p.val_2.all p.val_all
Static Major curve Cobb angle            0       3e-04         0
6W. Static Major curve Cobb angle        0       3e-04         0
6M. Static Major curve Cobb angle        0       3e-04         0
1Y. Static Major curve Cobb angle        0       3e-04         0
2Y. Static Major curve Cobb angle        0       3e-04         0
5Y. Static Major curve Cobb angle        0       3e-04         0


      t0 t1      1      2      3    All
1: Preop 2Y 0.0000 0.0000 0.0000 0.0000
2: Preop 5Y 0.0000 0.0000 0.0000 0.0000
3: Preop 6W 0.0000 0.0000 0.0000 0.0000
4:    6W 2Y 0.5335 0.6962 0.9397 0.7258
5:    6W 5Y 0.2164 0.9974 0.1254 0.1398
6:    2Y 5Y 0.0972 0.7108 0.1242 0.0902
```

[1] "Coronal Balance (C7PL to CSVL)"

```
                                  All.mean All.sd 1.mean  1.sd 2.mean  2.sd
Coronal Balance (C7PL to CSVL)       22.49  19.35  21.81 16.82  30.02 29.64
6W. Coronal Balance (C7PL to CSVL)   20.14  15.06  20.72 15.78  21.00 14.80
6M. Coronal Balance (C7PL to CSVL)   18.59  14.71  19.26 14.77  23.15 18.44
1Y. Coronal Balance (C7PL to CSVL)   18.02  13.84  18.41 12.99  21.43 19.15
2Y. Coronal Balance (C7PL to CSVL)   18.12  15.53  18.71 15.11  22.14 19.70
5Y. Coronal Balance (C7PL to CSVL)   20.81  17.32  24.28 19.35  20.21 16.21
                                  3.mean  3.sd p.val_1.2 p.val_1.3 p.val_1.all
Coronal Balance (C7PL to CSVL)     19.08 14.20    0.0464    0.1559      0.6746
6W. Coronal Balance (C7PL to CSVL) 18.61 13.91    0.9094    0.2816      0.6746
6M. Coronal Balance (C7PL to CSVL) 14.68 10.88    0.1859    0.0074      0.6746
1Y. Coronal Balance (C7PL to CSVL) 15.27 11.02    0.3103    0.0547      0.6746
2Y. Coronal Balance (C7PL to CSVL) 14.11 11.76    0.2598    0.0161      0.6746
5Y. Coronal Balance (C7PL to CSVL) 14.39 11.26    0.2868    0.0009      0.6746
                                  p.val_2.3 p.val_2.all p.val_all
Coronal Balance (C7PL to CSVL)       0.0098       0.064    0.0022
6W. Coronal Balance (C7PL to CSVL)   0.3487       0.064    0.5238
6M. Coronal Balance (C7PL to CSVL)   0.0051       0.064    0.0044
1Y. Coronal Balance (C7PL to CSVL)   0.0456       0.064    0.0440
2Y. Coronal Balance (C7PL to CSVL)   0.0105       0.064    0.0138
5Y. Coronal Balance (C7PL to CSVL)   0.1098       0.064    0.0149


      t0 t1      1      2      3    All
1: Preop 2Y 0.0827 0.0986 0.0150 0.0023
2: Preop 5Y 0.3334 0.0497 0.0489 0.3511
3: Preop 6W 0.5375 0.0419 0.8216 0.0873
4:    6W 2Y 0.2672 0.7386 0.0286 0.1213
5:    6W 5Y 0.1678 0.8319 0.0775 0.6961
6:    2Y 5Y 0.0326 0.6396 0.9017 0.1253
```

[1] "Sagittal Balance"

```
                All.mean All.sd 1.mean  1.sd 2.mean  2.sd 3.mean  3.sd
Sagittal Balance    41.67  63.02  48.71 60.85  93.82 59.04  -4.12 31.08
6W. Sagittal Balance 18.93  37.88  24.17 37.04  35.93 38.41  -1.75 29.89
6M. Sagittal Balance 16.75  44.68  21.65 43.09  38.57 52.33  -4.90 32.59
1Y. Sagittal Balance 19.20  48.86  23.53 45.94  49.10 54.00  -7.66 36.15
2Y. Sagittal Balance 24.55  49.64  28.22 44.43  60.15 54.87  -6.29 34.07
5Y. Sagittal Balance 34.29  48.85  38.81 50.06  61.98 43.51   5.35 33.89
                p.val_1.2 p.val_1.3 p.val_1.all p.val_2.3 p.val_2.all
Sagittal Balance    0.0000         0      0.2035         0           0
6W. Sagittal Balance 0.0528         0      0.2035         0           0
6M. Sagittal Balance 0.0402         0      0.2035         0           0
1Y. Sagittal Balance 0.0030         0      0.2035         0           0
2Y. Sagittal Balance 0.0003         0      0.2035         0           0
5Y. Sagittal Balance 0.0260         0      0.2035         0           0
                p.val_all
Sagittal Balance         0
6W. Sagittal Balance     0
6M. Sagittal Balance     0
```

```
1Y. Sagittal Balance        0
2Y. Sagittal Balance        0
5Y. Sagittal Balance        0


      t0 t1      1      2      3    All
1: Preop 2Y 0.0005 0.0022 0.6651 0.0002
2: Preop 5Y 0.1691 0.0063 0.1393 0.1640
3: Preop 6W 0.0000 0.0000 0.5995 0.0000
4:    6W 2Y 0.4029 0.0102 0.3729 0.1367
5:    6W 5Y 0.0236 0.0113 0.2700 0.0011
6:    2Y 5Y 0.1241 0.8715 0.0885 0.0573
```

[1] "Sagittal T2-T5"

```
                  All.mean All.sd 1.mean  1.sd 2.mean  2.sd 3.mean   3.sd
Sagittal T2-T5       11.09   9.83  11.18  9.79  10.67 10.35  11.18   9.67
6W. Sagittal T2-T5   13.65   8.18  13.47  7.77  14.64  9.57  13.40   8.08
6M. Sagittal T2-T5   14.05   9.61  14.07  9.98  13.60 11.43  14.27   7.79
1Y. Sagittal T2-T5   13.92   9.59  12.98  9.33  14.70 11.87  15.22   8.26
2Y. Sagittal T2-T5   14.33   9.94  12.59  9.38  16.11 11.27  16.13   9.58
5Y. Sagittal T2-T5   15.76  11.63  14.93 10.54  17.54 15.18  16.16  11.07
                  p.val_1.2 p.val_1.3 p.val_1.all p.val_2.3 p.val_2.all
Sagittal T2-T5       0.7345    0.9965      0.9186    0.7605      0.7687
6W. Sagittal T2-T5   0.4266    0.9472      0.9186    0.4369      0.7687
6M. Sagittal T2-T5   0.7934    0.8609      0.9186    0.7124      0.7687
1Y. Sagittal T2-T5   0.3417    0.0589      0.9186    0.7822      0.7687
2Y. Sagittal T2-T5   0.0498    0.0077      0.9186    0.9924      0.7687
5Y. Sagittal T2-T5   0.4150    0.5673      0.9186    0.6893      0.7687
                  p.val_all
Sagittal T2-T5       0.9352
6W. Sagittal T2-T5   0.6332
6M. Sagittal T2-T5   0.9245
1Y. Sagittal T2-T5   0.1863
2Y. Sagittal T2-T5   0.0127
5Y. Sagittal T2-T5   0.5889


      t0 t1      1      2      3    All
1: Preop 2Y 0.1871 0.0098 0.0007 0.0001
2: Preop 5Y 0.0077 0.0391 0.0169 0.0000
3: Preop 6W 0.0144 0.0372 0.0928 0.0003
4:    6W 2Y 0.3776 0.4781 0.0464 0.3771
5:    6W 5Y 0.2775 0.3725 0.1673 0.0525
6:    2Y 5Y 0.1040 0.6693 0.9864 0.2119
```

[1] "Sagittal T5-T12"

```
                   All.mean All.sd 1.mean  1.sd 2.mean  2.sd 3.mean   3.sd
Sagittal T5-T12       32.91  18.82  31.43 18.23  32.25 18.30  36.24  20.05
6W. Sagittal T5-T12   33.74  13.83  34.94 13.51  36.00 12.79  30.05  14.48
6M. Sagittal T5-T12   34.66  13.88  35.84 13.64  37.34 13.61  30.99  13.89
```

```
1Y. Sagittal T5-T12     35.43  13.85   36.49 13.91   37.85 13.79   31.85 13.24
2Y. Sagittal T5-T12     36.18  15.75   38.61 17.40   37.17 15.11   31.60 12.01
5Y. Sagittal T5-T12     40.10  16.53   41.50 15.90   44.81 15.15   33.92 17.33
                    p.val_1.2 p.val_1.3 p.val_1.all p.val_2.3 p.val_2.all
Sagittal T5-T12         0.7588    0.0464       0.369    0.1970       0.7972
6W. Sagittal T5-T12     0.6017    0.0096       0.369    0.0114       0.7972
6M. Sagittal T5-T12     0.4915    0.0078       0.369    0.0089       0.7972
1Y. Sagittal T5-T12     0.5383    0.0118       0.369    0.0141       0.7972
2Y. Sagittal T5-T12     0.5785    0.0004       0.369    0.0273       0.7972
5Y. Sagittal T5-T12     0.3310    0.0249       0.369    0.0081       0.7972
                    p.val_all
Sagittal T5-T12         0.1114
6W. Sagittal T5-T12     0.0108
6M. Sagittal T5-T12     0.0083
1Y. Sagittal T5-T12     0.0173
2Y. Sagittal T5-T12     0.0044
5Y. Sagittal T5-T12     0.0148


      t0 t1      1      2      3     All
1: Preop 2Y 0.0003 0.1204 0.0545 0.0174
2: Preop 5Y 0.0000 0.0012 0.4995 0.0000
3: Preop 6W 0.0364 0.1985 0.0157 0.5127
4:    6W 2Y 0.0432 0.6677 0.4452 0.0475
5:    6W 5Y 0.0020 0.0113 0.2281 0.0001
6:    2Y 5Y 0.2161 0.0362 0.4524 0.0197
```

[1] "Sagittal T2-T12"

```
                    All.mean All.sd 1.mean  1.sd 2.mean  2.sd 3.mean   3.sd
Sagittal T2-T12        39.93  19.68  38.61 19.46  40.27 19.30  42.32 20.29
6W. Sagittal T2-T12    43.16  15.31  44.43 14.45  46.84 14.87  38.61 16.22
6M. Sagittal T2-T12    44.77  15.26  45.40 14.61  48.90 17.79  41.43 14.35
1Y. Sagittal T2-T12    44.92  15.31  45.55 15.04  47.84 17.38  41.95 14.10
2Y. Sagittal T2-T12    45.64  15.57  45.61 15.46  49.21 17.78  43.46 13.96
5Y. Sagittal T2-T12    49.45  16.87  51.02 15.35  52.61 20.93  44.13 15.89
                    p.val_1.2 p.val_1.3 p.val_1.all p.val_2.3 p.val_2.all
Sagittal T2-T12         0.5546    0.1324       0.4456    0.5174       0.8989
6W. Sagittal T2-T12     0.3012    0.0050       0.4456    0.0024       0.8989
6M. Sagittal T2-T12     0.2053    0.0347       0.4456    0.0117       0.8989
1Y. Sagittal T2-T12     0.3932    0.0636       0.4456    0.0401       0.8989
2Y. Sagittal T2-T12     0.1970    0.2833       0.4456    0.0484       0.8989
5Y. Sagittal T2-T12     0.7182    0.0285       0.4456    0.0817       0.8989
                    p.val_all
Sagittal T2-T12         0.3042
6W. Sagittal T2-T12     0.0021
6M. Sagittal T2-T12     0.0137
1Y. Sagittal T2-T12     0.0654
2Y. Sagittal T2-T12     0.1077
5Y. Sagittal T2-T12     0.0631


      t0 t1      1      2      3     All
1: Preop 2Y 0.0003 0.0107 0.6540 0.0000
```

```
2: Preop 5Y 0.0000 0.0118 0.5795 0.0000
3: Preop 6W 0.0012 0.0400 0.1639 0.0172
4:    6W 2Y 0.4947 0.4567 0.0353 0.0527
5:    6W 5Y 0.0018 0.2077 0.0759 0.0002
6:    2Y 5Y 0.0138 0.4737 0.8208 0.0245
```

[1] "Lordosis (top of L1-S1)"

	All.mean	All.sd	1.mean	1.sd	2.mean	2.sd	3.mean
Lordosis (top of L1-S1)	-43.79	20.39	-40.72	18.67	-32.81	19.24	-56.42
6W. Lordosis (top of L1-S1)	-51.20	14.22	-50.24	14.13	-49.95	15.56	-53.79
6M. Lordosis (top of L1-S1)	-50.88	14.30	-49.83	13.62	-46.07	17.04	-55.58
1Y. Lordosis (top of L1-S1)	-51.16	14.46	-50.04	13.87	-47.19	16.62	-55.87
2Y. Lordosis (top of L1-S1)	-51.59	15.20	-50.42	15.53	-46.87	16.23	-56.52
5Y. Lordosis (top of L1-S1)	-50.64	15.97	-48.59	16.16	-49.25	14.85	-55.84

	3.sd	p.val_1.2	p.val_1.3	p.val_1.all	p.val_2.3
Lordosis (top of L1-S1)	18.14	0.0050	0.0000	0.0696	0.0000
6W. Lordosis (top of L1-S1)	13.40	0.9016	0.0376	0.0696	0.1300
6M. Lordosis (top of L1-S1)	12.64	0.1417	0.0005	0.0696	0.0006
1Y. Lordosis (top of L1-S1)	13.11	0.2514	0.0009	0.0696	0.0014
2Y. Lordosis (top of L1-S1)	12.56	0.1664	0.0011	0.0696	0.0003
5Y. Lordosis (top of L1-S1)	15.57	0.8435	0.0209	0.0696	0.0839

	p.val_2.all	p.val_all
Lordosis (top of L1-S1)	1e-04	0.0000
6W. Lordosis (top of L1-S1)	1e-04	0.1032
6M. Lordosis (top of L1-S1)	1e-04	0.0001
1Y. Lordosis (top of L1-S1)	1e-04	0.0006
2Y. Lordosis (top of L1-S1)	1e-04	0.0004
5Y. Lordosis (top of L1-S1)	1e-04	0.0574

```
      t0 t1      1      2      3    All
1: Preop 2Y 0.0000 0.0000 0.9617 0.0000
2: Preop 5Y 0.0005 0.0000 0.8520 0.0001
3: Preop 6W 0.0000 0.0000 0.2404 0.0000
4:    6W 2Y 0.9092 0.3172 0.1531 0.7430
5:    6W 5Y 0.4268 0.8430 0.4707 0.7105
6:    2Y 5Y 0.4058 0.5085 0.8110 0.5499
```

[1] "Pelvic Incidence"

	All.mean	All.sd	1.mean	1.sd	2.mean	2.sd	3.mean	3.sd
Pelvic Incidence	54.11	13.05	55.27	13.45	55.85	13.73	50.68	11.14
6W. Pelvic Incidence	54.15	12.92	55.41	13.46	56.27	13.25	50.37	10.77
6M. Pelvic Incidence	53.99	12.65	55.20	13.05	54.70	13.44	51.26	10.99
1Y. Pelvic Incidence	53.66	12.57	54.38	12.85	56.59	12.86	50.44	11.22
2Y. Pelvic Incidence	53.75	12.42	54.57	12.79	56.40	13.54	50.67	10.43
5Y. Pelvic Incidence	54.90	12.41	54.49	12.92	58.62	12.57	53.06	10.86

	p.val_1.2	p.val_1.3	p.val_1.all	p.val_2.3	p.val_2.all
Pelvic Incidence	0.7701	0.0018	0.3184	0.0134	0.3526
6W. Pelvic Incidence	0.6755	0.0008	0.3184	0.0064	0.3526

```
6M. Pelvic Incidence      0.8098     0.0085        0.3184     0.1158        0.3526
1Y. Pelvic Incidence      0.2699     0.0109        0.3184     0.0045        0.3526
2Y. Pelvic Incidence      0.3915     0.0121        0.3184     0.0095        0.3526
5Y. Pelvic Incidence      0.1437     0.5288        0.3184     0.0644        0.3526
                          p.val_all
Pelvic Incidence          0.0075
6W. Pelvic Incidence      0.0033
6M. Pelvic Incidence      0.0430
1Y. Pelvic Incidence      0.0090
2Y. Pelvic Incidence      0.0147
5Y. Pelvic Incidence      0.1774


      t0 t1      1      2      3     All
1: Preop 2Y 0.6193 0.8289 0.9951 0.7170
2: Preop 5Y 0.6500 0.3499 0.2533 0.5238
3: Preop 6W 0.9190 0.8664 0.8408 0.9695
4:    6W 2Y 0.5583 0.9610 0.8467 0.6936
5:    6W 5Y 0.5975 0.4341 0.1964 0.5476
6:    2Y 5Y 0.9634 0.4627 0.2534 0.3628
```

[1] "Pelvic Tilt"

```
                All.mean All.sd 1.mean  1.sd 2.mean 2.sd 3.mean 3.sd p.val_1.2
Pelvic Tilt        21.99  10.97  24.33 10.68  27.72 8.21  13.63 8.12    0.0091
6W. Pelvic Tilt    18.18   9.64  19.76  9.47  22.18 8.79  12.62 8.05    0.0822
6M. Pelvic Tilt    19.60  10.05  21.42  9.50  24.40 9.47  13.25 8.40    0.0471
1Y. Pelvic Tilt    19.40  10.25  20.95 10.09  24.32 8.30  13.18 8.80    0.0145
2Y. Pelvic Tilt    19.25   9.43  21.14  8.72  24.20 8.37  12.91 7.93    0.0252
5Y. Pelvic Tilt    21.93   9.91  23.68  8.89  27.04 8.52  14.67 9.04    0.0820
                p.val_1.3 p.val_1.all p.val_2.3 p.val_2.all p.val_all
Pelvic Tilt             0      0.0143         0           0         0
6W. Pelvic Tilt         0      0.0143         0           0         0
6M. Pelvic Tilt         0      0.0143         0           0         0
1Y. Pelvic Tilt         0      0.0143         0           0         0
2Y. Pelvic Tilt         0      0.0143         0           0         0
5Y. Pelvic Tilt         0      0.0143         0           0         0


      t0 t1      1      2      3     All
1: Preop 2Y 0.0024 0.0242 0.5468 0.0007
2: Preop 5Y 0.6063 0.7262 0.5340 0.9521
3: Preop 6W 0.0000 0.0007 0.3909 0.0000
4:    6W 2Y 0.1656 0.2242 0.8084 0.1633
5:    6W 5Y 0.0014 0.0186 0.2261 0.0001
6:    2Y 5Y 0.0398 0.1555 0.3011 0.0072
```

[1] "Sacral Slope"

```
                All.mean All.sd 1.mean  1.sd 2.mean  2.sd 3.mean 3.sd
Sacral Slope       32.56  11.12  31.61 11.17  28.08 11.06  37.22 9.39
6W. Sacral Slope   35.90  10.13  35.54 10.05  34.00 12.20  37.66 8.79
```

```
6M. Sacral Slope    34.37   10.03   33.59 10.17   30.28 10.78   38.16 7.97
1Y. Sacral Slope    34.30    9.66   33.33  9.55   32.28  9.93   37.47 9.05
2Y. Sacral Slope    34.58   10.38   33.57 10.26   32.18 11.37   37.83 9.23
5Y. Sacral Slope    32.97   10.72   30.80 10.52   31.58 10.66   38.42 9.40
                 p.val_1.2 p.val_1.3 p.val_1.all p.val_2.3 p.val_2.all
Sacral Slope        0.0298    0.0000      0.3286    0.0000      0.0039
6W. Sacral Slope    0.3953    0.0681      0.3286    0.0553      0.0039
6M. Sacral Slope    0.0497    0.0001      0.3286    0.0000      0.0039
1Y. Sacral Slope    0.4930    0.0007      0.3286    0.0021      0.0039
2Y. Sacral Slope    0.4327    0.0013      0.3286    0.0028      0.0039
5Y. Sacral Slope    0.7421    0.0001      0.3286    0.0088      0.0039
                 p.val_all
Sacral Slope        0.0000
6W. Sacral Slope    0.0800
6M. Sacral Slope    0.0000
1Y. Sacral Slope    0.0009
2Y. Sacral Slope    0.0016
5Y. Sacral Slope    0.0008


      t0 t1      1      2      3    All
1: Preop 2Y 0.0905 0.0520 0.6573 0.0172
2: Preop 5Y 0.5706 0.1598 0.5022 0.7005
3: Preop 6W 0.0003 0.0075 0.7352 0.0000
4:    6W 2Y 0.0765 0.4246 0.9005 0.1096
5:    6W 5Y 0.0008 0.3578 0.6675 0.0053
6:    2Y 5Y 0.0583 0.8143 0.7453 0.1360




[1] "RLL"


        All.mean All.sd 1.mean  1.sd 2.mean  2.sd 3.mean  3.sd p.val_1.2
RLL       -18.81  20.26 -22.55 18.10 -30.81 18.11  -3.79 17.01    0.0021
6W. RLL   -11.30  13.07 -13.11 13.09 -13.94 12.33  -6.08 12.08    0.6671
6M. RLL   -11.56  13.38 -13.32 12.36 -16.63 15.43  -5.33 11.87    0.1557
1Y. RLL   -11.22  13.90 -12.67 13.41 -17.05 14.32  -4.54 12.13    0.0493
2Y. RLL   -10.54  14.13 -12.03 14.26 -17.09 13.93  -3.85 11.20    0.0252
5Y. RLL   -12.40  14.34 -14.20 13.96 -16.10 12.46  -6.05 14.70    0.5044
        p.val_1.3 p.val_1.all p.val_2.3 p.val_2.all p.val_all
RLL        0.0000      0.0238    0.0000           0     0.000
6W. RLL    0.0000      0.0238    0.0003           0     0.000
6M. RLL    0.0000      0.0238    0.0000           0     0.000
1Y. RLL    0.0000      0.0238    0.0000           0     0.000
2Y. RLL    0.0000      0.0238    0.0000           0     0.000
5Y. RLL    0.0052      0.0238    0.0037           0     0.004


      t0 t1      1      2      3    All
1: Preop 2Y 0.0000 0.0000 0.9746 0.0000
2: Preop 5Y 0.0001 0.0000 0.4366 0.0001
3: Preop 6W 0.0000 0.0000 0.2780 0.0000
4:    6W 2Y 0.4740 0.2156 0.2026 0.4850
5:    6W 5Y 0.5519 0.4589 0.9925 0.4275
6:    2Y 5Y 0.2677 0.7428 0.4089 0.1988
```

[1] "Global Tilt"

	All.mean	All.sd	1.mean	1.sd	2.mean	2.sd	3.mean	3.sd
Global Tilt	26.29	17.73	29.71	17.30	38.32	13.42	11.31	9.61
6W. Global Tilt	18.64	12.13	20.99	11.97	24.07	10.77	10.61	9.09
6M. Global Tilt	20.43	13.71	22.97	12.99	27.11	13.29	11.47	10.73
1Y. Global Tilt	20.75	13.96	22.46	13.99	28.51	11.62	11.81	10.48
2Y. Global Tilt	20.89	13.98	23.74	12.28	29.75	12.90	10.58	11.00
5Y. Global Tilt	24.89	14.93	27.22	14.37	33.16	12.33	14.17	11.80

	p.val_1.2	p.val_1.3	p.val_1.all	p.val_2.3	p.val_2.all	p.val_all
Global Tilt	0.0001	0	0.0293	0	0	0
6W. Global Tilt	0.0843	0	0.0293	0	0	0
6M. Global Tilt	0.0547	0	0.0293	0	0	0
1Y. Global Tilt	0.0027	0	0.0293	0	0	0
2Y. Global Tilt	0.0048	0	0.0293	0	0	0
5Y. Global Tilt	0.0405	0	0.0293	0	0	0

	t0	t1	1	2	3	All
1:	Preop	2Y	0.0003	0.0007	0.6427	0.0000
2:	Preop	5Y	0.2226	0.0794	0.1859	0.3675
3:	Preop	6W	0.0000	0.0000	0.6185	0.0000
4:	6W	2Y	0.0528	0.0165	0.9862	0.0418
5:	6W	5Y	0.0011	0.0019	0.1012	0.0000
6:	2Y	5Y	0.0721	0.2500	0.1151	0.0080

[1] "T1 Sagittal Tilt"

	All.mean	All.sd	1.mean	1.sd	2.mean	2.sd	3.mean	3.sd
T1 Sagittal Tilt	-1.86	6.15	-1.64	6.10	2.22	6.77	-4.83	3.91
6W. T1 Sagittal Tilt	-3.59	4.01	-3.35	4.11	-3.37	4.19	-4.20	3.65
6M. T1 Sagittal Tilt	-4.12	4.30	-4.12	4.34	-2.52	5.26	-5.03	3.29
1Y. T1 Sagittal Tilt	-3.88	5.00	-3.93	5.05	-2.11	5.36	-4.97	4.33
2Y. T1 Sagittal Tilt	-3.63	4.47	-3.44	4.43	-1.39	5.60	-5.24	3.01
5Y. T1 Sagittal Tilt	-2.75	4.89	-2.84	5.49	-0.99	4.43	-3.87	3.36

	p.val_1.2	p.val_1.3	p.val_1.all	p.val_2.3	p.val_2.all
T1 Sagittal Tilt	0.0002	0.0000	0.7062	0.0000	1e-04
6W. T1 Sagittal Tilt	0.9776	0.1143	0.7062	0.2714	1e-04
6M. T1 Sagittal Tilt	0.0630	0.0698	0.7062	0.0043	1e-04
1Y. T1 Sagittal Tilt	0.0427	0.1176	0.7062	0.0030	1e-04
2Y. T1 Sagittal Tilt	0.0305	0.0005	0.7062	0.0001	1e-04
5Y. T1 Sagittal Tilt	0.0811	0.2096	0.7062	0.0059	1e-04

	p.val_all
T1 Sagittal Tilt	0.0000
6W. T1 Sagittal Tilt	0.2959
6M. T1 Sagittal Tilt	0.0057
1Y. T1 Sagittal Tilt	0.0093
2Y. T1 Sagittal Tilt	0.0000
5Y. T1 Sagittal Tilt	0.0584

	t0	t1	1	2	3	All

```
       t0 t1      1      2      3    All
1: Preop 2Y 0.0029 0.0042 0.4455 0.0001
2: Preop 5Y 0.1223 0.0106 0.1630 0.0932
3: Preop 6W 0.0030 0.0000 0.2863 0.0000
4:    6W 2Y 0.8571 0.0631 0.0584 0.9135
5:    6W 5Y 0.4656 0.0269 0.6327 0.0780
6:    2Y 5Y 0.4051 0.7404 0.0372 0.0758
```

[1] "Thoracolumbar L2-T10"

```
                         All.mean All.sd 1.mean  1.sd 2.mean  2.sd 3.mean   3.sd
Thoracolumbar L2-T10        10.03  20.48  10.75 20.57  12.01 19.20   7.38  21.02
6W. Thoracolumbar L2-T10     4.91  12.50   6.15 12.72   7.37 10.07   1.17  12.67
6M. Thoracolumbar L2-T10     5.08  12.15   6.75 11.21   6.98  9.83   0.58  14.05
1Y. Thoracolumbar L2-T10     5.27  12.67   7.60 11.91   7.36 11.02  -0.40  13.31
2Y. Thoracolumbar L2-T10     6.07  12.79   7.70 12.82   8.45 11.79   1.76  12.43
5Y. Thoracolumbar L2-T10     7.26  14.64   8.98 14.19  10.45 12.40   1.49  15.74
                         p.val_1.2 p.val_1.3 p.val_1.all p.val_2.3 p.val_2.all
Thoracolumbar L2-T10        0.6594    0.1930      0.6943    0.1531      0.4591
6W. Thoracolumbar L2-T10    0.4764    0.0032      0.6943    0.0017      0.4591
6M. Thoracolumbar L2-T10    0.8864    0.0007      0.6943    0.0025      0.4591
1Y. Thoracolumbar L2-T10    0.8940    0.0000      0.6943    0.0004      0.4591
2Y. Thoracolumbar L2-T10    0.7050    0.0008      0.6943    0.0022      0.4591
5Y. Thoracolumbar L2-T10    0.6059    0.0144      0.6943    0.0114      0.4591
                         p.val_all
Thoracolumbar L2-T10        0.2903
6W. Thoracolumbar L2-T10    0.0028
6M. Thoracolumbar L2-T10    0.0003
1Y. Thoracolumbar L2-T10    0.0000
2Y. Thoracolumbar L2-T10    0.0011
5Y. Thoracolumbar L2-T10    0.0134
```

```
       t0 t1      1      2      3    All
1: Preop 2Y 0.0983 0.2274 0.0271 0.0032
2: Preop 5Y 0.4179 0.6460 0.0766 0.0907
3: Preop 6W 0.0103 0.1018 0.0141 0.0001
4:    6W 2Y 0.2899 0.6175 0.7588 0.2713
5:    6W 5Y 0.1338 0.2645 0.9114 0.0955
6:    2Y 5Y 0.5090 0.4860 0.9249 0.4062
```

[1] "RSA"

```
        All.mean All.sd 1.mean  1.sd 2.mean  2.sd 3.mean  3.sd p.val_1.2
RSA        15.26  15.41  18.19 14.95  26.40 11.11   1.87  8.01    0.0000
6W. RSA     7.59   9.53   9.35  9.14  12.02  8.99   1.38  7.47    0.0668
6M. RSA     9.46  10.88  11.41  9.96  15.62 10.56   1.94  8.62    0.0140
1Y. RSA     9.81  11.07  11.27 10.82  16.16  9.23   2.34  8.57    0.0021
2Y. RSA    10.09  11.67  12.40  9.72  17.87 11.23   1.34  9.48    0.0027
5Y. RSA    13.54  12.84  16.07 12.10  20.03 10.37   3.70 10.41    0.1024
        p.val_1.3 p.val_1.all p.val_2.3 p.val_2.all p.val_all
RSA             0      0.0311         0           0         0
```

```
6W. RSA          0      0.0311        0         0         0
6M. RSA          0      0.0311        0         0         0
1Y. RSA          0      0.0311        0         0         0
2Y. RSA          0      0.0311        0         0         0
5Y. RSA          0      0.0311        0         0         0


      t0 t1      1       2       3     All
1: Preop 2Y 0.0000 0.0001 0.6917 0.0000
2: Preop 5Y 0.2221 0.0108 0.3290 0.2017
3: Preop 6W 0.0000 0.0000 0.6733 0.0000
4:    6W 2Y 0.0059 0.0042 0.9771 0.0058
5:    6W 5Y 0.0000 0.0012 0.2162 0.0000
6:    2Y 5Y 0.0226 0.3920 0.2344 0.0072
```

[1] "RPV"

```
        All.mean All.sd 1.mean 1.sd 2.mean 2.sd 3.mean 3.sd p.val_1.2 p.val_1.3
RPV        -8.42   9.15 -10.11 8.94 -13.87 6.63  -1.67 6.86    0.0005         0
6W. RPV    -5.03   7.61  -6.15 7.18  -8.20 8.06  -0.94 6.56    0.0940         0
6M. RPV    -6.49   7.91  -7.98 7.33 -10.99 7.54  -1.09 6.24    0.0117         0
1Y. RPV    -6.39   7.94  -7.75 7.63 -10.10 6.42  -1.35 7.02    0.0266         0
2Y. RPV    -6.14   7.76  -7.64 7.08 -10.10 7.03  -1.07 6.79    0.0305         0
5Y. RPV    -8.42   8.24 -10.34 7.19 -12.01 7.16  -1.89 7.49    0.2952         0
        p.val_1.all p.val_2.3 p.val_2.all p.val_all
RPV          0.0339         0           0         0
6W. RPV      0.0339         0           0         0
6M. RPV      0.0339         0           0         0
1Y. RPV      0.0339         0           0         0
2Y. RPV      0.0339         0           0         0
5Y. RPV      0.0339         0           0         0


      t0 t1      1       2       3     All
1: Preop 2Y 0.0042 0.0037 0.5505 0.0006
2: Preop 5Y 0.8161 0.2486 0.8743 0.9929
3: Preop 6W 0.0000 0.0001 0.4539 0.0000
4:    6W 2Y 0.0561 0.1961 0.9021 0.0718
5:    6W 5Y 0.0000 0.0328 0.4970 0.0000
6:    2Y 5Y 0.0071 0.2538 0.5624 0.0059
```

Quality of Life

[1] "ODI - Score (%)"

```
                All.mean All.sd 1.mean  1.sd 2.mean  2.sd 3.mean  3.sd
ODI - Score (%)    37.26  19.78  40.27 14.03  61.84 11.20  16.10 11.27
6M. ODI - Score (%)   28.30  17.97  28.22 15.98  45.19 18.30  17.78 13.04
1Y. ODI - Score (%)   25.72  18.07  26.46 16.30  44.66 15.57  12.83 10.94
2Y. ODI - Score (%)   27.53  21.27  28.07 19.36  50.35 19.33  12.76 11.29
```

```
5Y. ODI - Score (%)     28.33  21.38  29.38 20.03  49.02 19.14  12.18 10.78
                  p.val_1.2 p.val_1.3 p.val_1.all p.val_2.3 p.val_2.all
ODI - Score (%)              0         0      0.0373         0           0
6M. ODI - Score (%)          0         0      0.0373         0           0
1Y. ODI - Score (%)          0         0      0.0373         0           0
2Y. ODI - Score (%)          0         0      0.0373         0           0
5Y. ODI - Score (%)          0         0      0.0373         0           0
                  p.val_all
ODI - Score (%)           0
6M. ODI - Score (%)       0
1Y. ODI - Score (%)       0
2Y. ODI - Score (%)       0
5Y. ODI - Score (%)       0


      t0 t1      1      2      3    All
1: Preop 2Y 0.0000 0.0002 0.0418 0.0000
2: Preop 5Y 0.0000 0.0003 0.0307 0.0000
3: Preop 6M 0.0000 0.0000 0.3518 0.0000
4:    6M 2Y 0.9373 0.1463 0.0058 0.6108
5:    6M 5Y 0.5634 0.3259 0.0047 0.9874
6:    2Y 5Y 0.5455 0.7388 0.7490 0.6538




[1] "SRS22 - Function / Activity"

                                All.mean All.sd 1.mean 1.sd 2.mean 2.sd 3.mean
SRS22 - Function / Activity         3.09   0.87   2.94 0.55   2.11 0.52   4.01
6M. SRS22 - Function / Activity     3.26   0.82   3.19 0.66   2.59 0.73   3.81
1Y. SRS22 - Function / Activity     3.40   0.89   3.30 0.73   2.59 0.77   4.10
2Y. SRS22 - Function / Activity     3.48   0.93   3.33 0.75   2.63 0.85   4.27
5Y. SRS22 - Function / Activity     3.50   0.91   3.45 0.76   2.67 0.88   4.16
                                3.sd p.val_1.2 p.val_1.3 p.val_1.all p.val_2.3
SRS22 - Function / Activity     0.70         0         0      0.0114         0
6M. SRS22 - Function / Activity 0.79         0         0      0.0114         0
1Y. SRS22 - Function / Activity 0.73         0         0      0.0114         0
2Y. SRS22 - Function / Activity 0.66         0         0      0.0114         0
5Y. SRS22 - Function / Activity 0.78         0         0      0.0114         0
                                p.val_2.all p.val_all
SRS22 - Function / Activity               0         0
6M. SRS22 - Function / Activity           0         0
1Y. SRS22 - Function / Activity           0         0
2Y. SRS22 - Function / Activity           0         0
5Y. SRS22 - Function / Activity           0         0


      t0 t1      1      2      3    All
1: Preop 2Y 0.0000 0.0001 0.0099 0.0000
2: Preop 5Y 0.0000 0.0005 0.2157 0.0000
3: Preop 6M 0.0001 0.0001 0.0640 0.0082
4:    6M 2Y 0.0522 0.8295 0.0000 0.0013
5:    6M 5Y 0.0010 0.6438 0.0067 0.0009
6:    2Y 5Y 0.1493 0.7954 0.3911 0.7342
```

[1] "SRS22 - Pain"

	All.mean	All.sd	1.mean	1.sd	2.mean	2.sd	3.mean	3.sd	p.val_1.2
SRS22 - Pain	2.62	0.97	2.48	0.70	1.52	0.47	3.60	0.78	0
6M. SRS22 - Pain	3.42	0.90	3.46	0.83	2.79	0.90	3.75	0.84	0
1Y. SRS22 - Pain	3.57	0.98	3.57	0.92	2.68	0.99	4.08	0.69	0
2Y. SRS22 - Pain	3.49	1.09	3.49	1.02	2.51	1.08	4.07	0.77	0
5Y. SRS22 - Pain	3.38	1.13	3.35	1.06	2.50	1.09	4.02	0.89	0

	p.val_1.3	p.val_1.all	p.val_2.3	p.val_2.all	p.val_all
SRS22 - Pain	0.0000	0.0456	0	0	0
6M. SRS22 - Pain	0.0068	0.0456	0	0	0
1Y. SRS22 - Pain	0.0000	0.0456	0	0	0
2Y. SRS22 - Pain	0.0000	0.0456	0	0	0
5Y. SRS22 - Pain	0.0000	0.0456	0	0	0

	t0	t1	1	2	3	All
1:	Preop	2Y	0.0000	0.0000	0.0000	0.0000
2:	Preop	5Y	0.0000	0.0000	0.0032	0.0000
3:	Preop	6M	0.0000	0.0000	0.2089	0.0000
4:	6M	2Y	0.7086	0.1421	0.0062	0.3696
5:	6M	5Y	0.3116	0.1692	0.0619	0.6041
6:	2Y	5Y	0.2105	0.9400	0.6934	0.2191

[1] "SRS22 - Self image / Appearance"

	All.mean	All.sd	1.mean	1.sd	2.mean	2.sd
SRS22 - Self image / Appearance	2.42	0.76	2.45	0.67	1.65	0.50
6M. SRS22 - Self image / Appearance	3.48	0.83	3.48	0.78	2.93	0.92
1Y. SRS22 - Self image / Appearance	3.52	0.80	3.54	0.70	2.82	0.87
2Y. SRS22 - Self image / Appearance	3.43	0.93	3.42	0.83	2.60	0.93
5Y. SRS22 - Self image / Appearance	3.37	0.93	3.36	0.87	2.60	0.87

	3.mean	3.sd	p.val_1.2	p.val_1.3	p.val_1.all
SRS22 - Self image / Appearance	2.84	0.70	0e+00	0e+00	0.6715
6M. SRS22 - Self image / Appearance	3.82	0.71	1e-04	2e-04	0.6715
1Y. SRS22 - Self image / Appearance	3.91	0.67	0e+00	0e+00	0.6715
2Y. SRS22 - Self image / Appearance	3.95	0.76	0e+00	0e+00	0.6715
5Y. SRS22 - Self image / Appearance	3.90	0.74	0e+00	0e+00	0.6715

	p.val_2.3	p.val_2.all	p.val_all
SRS22 - Self image / Appearance	0	0	0
6M. SRS22 - Self image / Appearance	0	0	0
1Y. SRS22 - Self image / Appearance	0	0	0
2Y. SRS22 - Self image / Appearance	0	0	0
5Y. SRS22 - Self image / Appearance	0	0	0

	t0	t1	1	2	3	All
1:	Preop	2Y	0.0000	0.0000	0.0000	0.0000
2:	Preop	5Y	0.0000	0.0000	0.0000	0.0000
3:	Preop	6M	0.0000	0.0000	0.0000	0.0000
4:	6M	2Y	0.4723	0.0573	0.2392	0.4681
5:	6M	5Y	0.1890	0.0722	0.5067	0.1429
6:	2Y	5Y	0.5183	0.9936	0.7040	0.4427

[1] "SRS22 - Mental health"

	All.mean	All.sd	1.mean	1.sd	2.mean	2.sd	3.mean	3.sd
SRS22 - Mental health	3.17	0.86	3.28	0.80	2.26	0.65	3.53	0.71
6M. SRS22 - Mental health	3.55	0.85	3.62	0.86	2.95	0.88	3.79	0.61
1Y. SRS22 - Mental health	3.61	0.83	3.68	0.78	2.93	0.96	3.87	0.61
2Y. SRS22 - Mental health	3.51	0.94	3.60	0.94	2.68	0.97	3.81	0.62
5Y. SRS22 - Mental health	3.55	0.89	3.64	0.83	2.66	0.85	3.91	0.67

	p.val_1.2	p.val_1.3	p.val_1.all	p.val_2.3	p.val_2.all
SRS22 - Mental health	0	0.0070	0.1557	0	0
6M. SRS22 - Mental health	0	0.0509	0.1557	0	0
1Y. SRS22 - Mental health	0	0.0250	0.1557	0	0
2Y. SRS22 - Mental health	0	0.0253	0.1557	0	0
5Y. SRS22 - Mental health	0	0.0165	0.1557	0	0

	p.val_all
SRS22 - Mental health	0
6M. SRS22 - Mental health	0
1Y. SRS22 - Mental health	0
2Y. SRS22 - Mental health	0
5Y. SRS22 - Mental health	0

	t0	t1	1	2	3	All
1:	Preop	2Y	0.0002	0.0071	0.0032	0.0000
2:	Preop	5Y	0.0000	0.0149	0.0008	0.0000
3:	Preop	6M	0.0001	0.0000	0.0063	0.0000
4:	6M	2Y	0.8972	0.1214	0.7953	0.5454
5:	6M	5Y	0.7597	0.0969	0.2696	0.9850
6:	2Y	5Y	0.6746	0.8832	0.3777	0.5706

[1] "SRS22 - SRS Subtotal score"

	All.mean	All.sd	1.mean	1.sd	2.mean	2.sd	3.mean
SRS22 - SRS Subtotal score	2.83	0.70	2.79	0.46	1.90	0.36	3.49
6M. SRS22 - SRS Subtotal score	3.43	0.69	3.43	0.62	2.82	0.69	3.79
1Y. SRS22 - SRS Subtotal score	3.53	0.74	3.53	0.63	2.76	0.76	3.99
2Y. SRS22 - SRS Subtotal score	3.48	0.85	3.46	0.75	2.61	0.81	4.02
5Y. SRS22 - SRS Subtotal score	3.44	0.87	3.43	0.79	2.61	0.79	4.00

	3.sd	p.val_1.2	p.val_1.3	p.val_1.all	p.val_2.3
SRS22 - SRS Subtotal score	0.56	0	0	0.4146	0
6M. SRS22 - SRS Subtotal score	0.58	0	0	0.4146	0
1Y. SRS22 - SRS Subtotal score	0.53	0	0	0.4146	0
2Y. SRS22 - SRS Subtotal score	0.56	0	0	0.4146	0
5Y. SRS22 - SRS Subtotal score	0.67	0	0	0.4146	0

	p.val_2.all	p.val_all
SRS22 - SRS Subtotal score	0	0
6M. SRS22 - SRS Subtotal score	0	0
1Y. SRS22 - SRS Subtotal score	0	0
2Y. SRS22 - SRS Subtotal score	0	0
5Y. SRS22 - SRS Subtotal score	0	0

```
       t0 t1      1      2      3     All
1: Preop 2Y 0.0000 0.0000 0.0000 0.0000
2: Preop 5Y 0.0000 0.0000 0.0000 0.0000
3: Preop 6M 0.0000 0.0000 0.0003 0.0000
4:    6M 2Y 0.7228 0.1317 0.0057 0.4272
5:    6M 5Y 0.9320 0.1710 0.0526 0.8979
6:    2Y 5Y 0.7049 1.0000 0.7869 0.5885
```

[1] "SRS22 - Satisfaction with management"

	All.mean	All.sd	1.mean	1.sd	2.mean
SRS22 - Satisfaction with management	3.09	1.08	3.15	0.96	2.27
6M. SRS22 - Satisfaction with management	4.24	0.86	4.23	0.86	3.88
1Y. SRS22 - Satisfaction with management	4.23	0.91	4.23	0.90	3.69
2Y. SRS22 - Satisfaction with management	4.14	1.00	4.08	0.99	3.68
5Y. SRS22 - Satisfaction with management	4.01	0.99	4.00	0.98	3.49

	2.sd	3.mean	3.sd	p.val_1.2	p.val_1.3
SRS22 - Satisfaction with management	1.11	3.48	1.08	0.0004	0.1002
6M. SRS22 - Satisfaction with management	1.08	4.48	0.58	0.0325	0.0039
1Y. SRS22 - Satisfaction with management	1.17	4.53	0.60	0.0026	0.0009
2Y. SRS22 - Satisfaction with management	1.29	4.53	0.65	0.0382	0.0000
5Y. SRS22 - Satisfaction with management	1.18	4.38	0.72	0.0165	0.0019

	p.val_1.all	p.val_2.3	p.val_2.all
SRS22 - Satisfaction with management	0.5939	0e+00	8e-04
6M. SRS22 - Satisfaction with management	0.5939	3e-04	8e-04
1Y. SRS22 - Satisfaction with management	0.5939	0e+00	8e-04
2Y. SRS22 - Satisfaction with management	0.5939	0e+00	8e-04
5Y. SRS22 - Satisfaction with management	0.5939	1e-04	8e-04

	p.val_all
SRS22 - Satisfaction with management	0e+00
6M. SRS22 - Satisfaction with management	2e-04
1Y. SRS22 - Satisfaction with management	0e+00
2Y. SRS22 - Satisfaction with management	0e+00
5Y. SRS22 - Satisfaction with management	0e+00

```
       t0 t1      1      2      3     All
1: Preop 2Y 0.0000 0.0000 0.0000 0.0000
2: Preop 5Y 0.0000 0.0001 0.0000 0.0000
3: Preop 6M 0.0000 0.0000 0.0000 0.0000
4:    6M 2Y 0.1249 0.3727 0.5966 0.1775
5:    6M 5Y 0.0242 0.1002 0.3406 0.0037
6:    2Y 5Y 0.4490 0.4506 0.1787 0.1155
```

[1] "SF36 - PCS"

	All.mean	All.sd	1.mean	1.sd	2.mean	2.sd	3.mean	3.sd	p.val_1.2
SF36 - PCS	36.45	9.47	34.10	7.32	29.12	6.40	46.26	7.68	0e+00
6M. SF36 - PCS	40.54	9.17	39.81	8.43	34.18	7.72	46.19	8.36	0e+00
1Y. SF36 - PCS	41.94	10.01	41.20	9.06	33.24	8.43	48.71	7.93	0e+00

```
2Y. SF36 - PCS    42.06  10.41  41.20  9.22  33.37 9.69  49.09 8.30     0e+00
5Y. SF36 - PCS    41.64  11.22  40.49 10.42  33.58 9.64  49.54 9.19     2e-04
                p.val_1.3 p.val_1.all p.val_2.3 p.val_2.all p.val_all
SF36 - PCS             0      0.0012         0           0         0
6M. SF36 - PCS         0      0.0012         0           0         0
1Y. SF36 - PCS         0      0.0012         0           0         0
2Y. SF36 - PCS         0      0.0012         0           0         0
5Y. SF36 - PCS         0      0.0012         0           0         0


        t0 t1      1      2      3     All
1: Preop 2Y 0.0000 0.0068 0.0172 0.0000
2: Preop 5Y 0.0000 0.0139 0.0230 0.0000
3: Preop 6M 0.0000 0.0002 0.9534 0.0000
4:    6M 2Y 0.1297 0.6246 0.0202 0.0460
5:    6M 5Y 0.5238 0.7485 0.0248 0.2103
6:    2Y 5Y 0.5144 0.9172 0.7577 0.6449
```

[1] "SF36 - MCS"

```
              All.mean All.sd 1.mean  1.sd 2.mean  2.sd 3.mean  3.sd p.val_1.2
SF36 - MCS       42.99  11.84  44.89 11.70  33.08 10.00  44.99 10.04     0e+00
6M. SF36 - MCS   47.14  11.82  48.09 12.37  41.17 11.84  49.01  9.28     2e-04
1Y. SF36 - MCS   47.55  11.57  48.75 11.33  40.03 13.37  49.67  8.86     0e+00
2Y. SF36 - MCS   46.96  12.12  47.64 12.26  38.38 13.01  50.88  8.17     0e+00
5Y. SF36 - MCS   47.66  11.33  48.74 10.89  38.90 12.41  50.64  8.89     0e+00
                p.val_1.3 p.val_1.all p.val_2.3 p.val_2.all p.val_all
SF36 - MCS         0.9377      0.0686     0e+00           0     0e+00
6M. SF36 - MCS     0.4961      0.0686     1e-04           0     1e-04
1Y. SF36 - MCS     0.4584      0.0686     0e+00           0     0e+00
2Y. SF36 - MCS     0.0094      0.0686     0e+00           0     0e+00
5Y. SF36 - MCS     0.1917      0.0686     0e+00           0     0e+00


        t0 t1      1      2      3     All
1: Preop 2Y 0.0242 0.0163 0.0000 0.0000
2: Preop 5Y 0.0017 0.0172 0.0004 0.0000
3: Preop 6M 0.0092 0.0001 0.0060 0.0000
4:    6M 2Y 0.7244 0.2338 0.1533 0.8411
5:    6M 5Y 0.6143 0.3728 0.2823 0.5974
6:    2Y 5Y 0.3891 0.8434 0.8638 0.4752
```

Quality of Life change with respect baseline

[1] "ODI - Score (%)"

```
                 All.mean All.sd 1.mean  1.sd 2.mean  2.sd 3.mean  3.sd
6M. ODI - Score (%)  -9.61  17.12  28.22 15.98  45.19 18.30  17.78 13.04
1Y. ODI - Score (%) -12.09  15.37  26.46 16.30  44.66 15.57  12.83 10.94
2Y. ODI - Score (%)  -9.90  16.72  28.07 19.36  50.35 19.33  12.76 11.29
```

```
5Y. ODI - Score (%)      -9.47  17.74  29.38  20.03  49.02 19.14  12.18 10.78
                     p.val_1.2 p.val_1.3 p.val_1.all p.val_2.3 p.val_2.all
6M. ODI - Score (%)     0.1600    0.0000      0.0373    0.0000           0
1Y. ODI - Score (%)     0.0533    0.0000      0.0373    0.0000           0
2Y. ODI - Score (%)     0.5632    0.0000      0.0373    0.0095           0
5Y. ODI - Score (%)     0.6182    0.0058      0.0373    0.0185           0
                     p.val_all
6M. ODI - Score (%)     0.0000
1Y. ODI - Score (%)     0.0000
2Y. ODI - Score (%)     0.0003
5Y. ODI - Score (%)     0.0360
```

[1] "SRS22 - Function / Activity"

```
                             All.mean All.sd 1.mean 1.sd 2.mean 2.sd 3.mean
6M. SRS22 - Function / Activity   0.17   0.75   3.19 0.66   2.59 0.73   3.81
1Y. SRS22 - Function / Activity   0.32   0.69   3.30 0.73   2.59 0.77   4.10
2Y. SRS22 - Function / Activity   0.37   0.71   3.33 0.75   2.63 0.85   4.27
5Y. SRS22 - Function / Activity   0.42   0.78   3.45 0.76   2.67 0.88   4.16
                             3.sd p.val_1.2 p.val_1.3 p.val_1.all p.val_2.3
6M. SRS22 - Function / Activity 0.79    0.0661    0.0000      0.0114    0.0000
1Y. SRS22 - Function / Activity 0.73    0.6019    0.0002      0.0114    0.0009
2Y. SRS22 - Function / Activity 0.66    0.2689    0.2138      0.0114    0.0424
5Y. SRS22 - Function / Activity 0.78    0.9226    0.0018      0.0114    0.0685
                             p.val_2.all p.val_all
6M. SRS22 - Function / Activity           0    0.0000
1Y. SRS22 - Function / Activity           0    0.0003
2Y. SRS22 - Function / Activity           0    0.1776
5Y. SRS22 - Function / Activity           0    0.0228
```

[1] "SRS22 - Pain"

```
              All.mean All.sd 1.mean 1.sd 2.mean 2.sd 3.mean 3.sd p.val_1.2
6M. SRS22 - Pain   0.82   0.95   3.46 0.83   2.79 0.90   3.75 0.84    0.0719
1Y. SRS22 - Pain   0.94   0.93   3.57 0.92   2.68 0.99   4.08 0.69    0.7710
2Y. SRS22 - Pain   0.88   0.99   3.49 1.02   2.51 1.08   4.07 0.77    0.6980
5Y. SRS22 - Pain   0.78   1.06   3.35 1.06   2.50 1.09   4.02 0.89    0.8022
              p.val_1.3 p.val_1.all p.val_2.3 p.val_2.all p.val_all
6M. SRS22 - Pain   0.0000      0.0456    0.0000           0    0.0000
1Y. SRS22 - Pain   0.0000      0.0456    0.0001           0    0.0000
2Y. SRS22 - Pain   0.0000      0.0456    0.0026           0    0.0001
5Y. SRS22 - Pain   0.0065      0.0456    0.0327           0    0.0246
```

[1] "SRS22 - Self image / Appearance"

```
                                 All.mean All.sd 1.mean 1.sd 2.mean 2.sd
6M. SRS22 - Self image / Appearance   1.08   0.97   3.48 0.78   2.93 0.92
1Y. SRS22 - Self image / Appearance   1.13   0.88   3.54 0.70   2.82 0.87
```

```
2Y. SRS22 - Self image / Appearance       1.03    0.97    3.42 0.83    2.60 0.93
5Y. SRS22 - Self image / Appearance       0.97    0.91    3.36 0.87    2.60 0.87
                                       3.mean 3.sd p.val_1.2 p.val_1.3 p.val_1.all
6M. SRS22 - Self image / Appearance       3.82 0.71    0.1801    0.7398      0.6715
1Y. SRS22 - Self image / Appearance       3.91 0.67    0.8318    0.5165      0.6715
2Y. SRS22 - Self image / Appearance       3.95 0.76    0.6643    0.2992      0.6715
5Y. SRS22 - Self image / Appearance       3.90 0.74    0.6628    0.6590      0.6715
                                       p.val_2.3 p.val_2.all p.val_all
6M. SRS22 - Self image / Appearance       0.1392           0    0.2905
1Y. SRS22 - Self image / Appearance       0.4898           0    0.7388
2Y. SRS22 - Self image / Appearance       0.2305           0    0.4581
5Y. SRS22 - Self image / Appearance       0.4679           0    0.7903
```

[1] "SRS22 - Mental health"

```
                        All.mean All.sd 1.mean 1.sd 2.mean 2.sd 3.mean 3.sd
6M. SRS22 - Mental health    0.37   0.81    3.62 0.86    2.95 0.88    3.79 0.61
1Y. SRS22 - Mental health    0.43   0.78    3.68 0.78    2.93 0.96    3.87 0.61
2Y. SRS22 - Mental health    0.34   0.82    3.60 0.94    2.68 0.97    3.81 0.62
5Y. SRS22 - Mental health    0.34   0.79    3.64 0.83    2.66 0.85    3.91 0.67
                        p.val_1.2 p.val_1.3 p.val_1.all p.val_2.3 p.val_2.all
6M. SRS22 - Mental health    0.0204    0.2564      0.1557    0.0027           0
1Y. SRS22 - Mental health    0.1792    0.1377      0.1557    0.0280           0
2Y. SRS22 - Mental health    0.4285    0.5620      0.1557    0.2568           0
5Y. SRS22 - Mental health    0.5456    0.7952      0.1557    0.6820           0
                        p.val_all
6M. SRS22 - Mental health    0.0103
1Y. SRS22 - Mental health    0.0532
2Y. SRS22 - Mental health    0.4952
5Y. SRS22 - Mental health    0.8214
```

[1] "SRS22 - SRS Subtotal score"

```
                          All.mean All.sd 1.mean 1.sd 2.mean 2.sd 3.mean
6M. SRS22 - SRS Subtotal score    0.60   0.64    3.43 0.62    2.82 0.69    3.79
1Y. SRS22 - SRS Subtotal score    0.70   0.62    3.53 0.63    2.76 0.76    3.99
2Y. SRS22 - SRS Subtotal score    0.65   0.68    3.46 0.75    2.61 0.81    4.02
5Y. SRS22 - SRS Subtotal score    0.61   0.73    3.43 0.79    2.61 0.79    4.00
                          3.sd p.val_1.2 p.val_1.3 p.val_1.all p.val_2.3
6M. SRS22 - SRS Subtotal score 0.58    0.0156    0.0000      0.4146    0.0000
1Y. SRS22 - SRS Subtotal score 0.53    0.4095    0.0005      0.4146    0.0010
2Y. SRS22 - SRS Subtotal score 0.56    0.8242    0.0994      0.4146    0.1317
5Y. SRS22 - SRS Subtotal score 0.67    0.9767    0.1544      0.4146    0.3084
                          p.val_2.all p.val_all
6M. SRS22 - SRS Subtotal score        0    0.0000
1Y. SRS22 - SRS Subtotal score        0    0.0004
2Y. SRS22 - SRS Subtotal score        0    0.2318
5Y. SRS22 - SRS Subtotal score        0    0.4324
```

[1] "SRS22 - Satisfaction with management"

	All.mean	All.sd	1.mean	1.sd	2.mean
6M. SRS22 - Satisfaction with management	1.15	1.35	4.23	0.86	3.88
1Y. SRS22 - Satisfaction with management	1.17	1.26	4.23	0.90	3.69
2Y. SRS22 - Satisfaction with management	0.95	1.33	4.08	0.99	3.68
5Y. SRS22 - Satisfaction with management	0.82	1.23	4.00	0.98	3.49

	2.sd	3.mean	3.sd	p.val_1.2	p.val_1.3
6M. SRS22 - Satisfaction with management	1.08	4.48	0.58	0.1599	0.9835
1Y. SRS22 - Satisfaction with management	1.17	4.53	0.60	0.3146	0.9047
2Y. SRS22 - Satisfaction with management	1.29	4.53	0.65	0.1418	0.0656
5Y. SRS22 - Satisfaction with management	1.18	4.38	0.72	0.7017	0.2223

	p.val_1.all	p.val_2.3	p.val_2.all
6M. SRS22 - Satisfaction with management	0.5939	0.2204	8e-04
1Y. SRS22 - Satisfaction with management	0.5939	0.3994	8e-04
2Y. SRS22 - Satisfaction with management	0.5939	0.7457	8e-04
5Y. SRS22 - Satisfaction with management	0.5939	0.2484	8e-04

	p.val_all
6M. SRS22 - Satisfaction with management	0.2790
1Y. SRS22 - Satisfaction with management	0.5269
2Y. SRS22 - Satisfaction with management	0.0887
5Y. SRS22 - Satisfaction with management	0.4450

[1] "SF36 - PCS"

	All.mean	All.sd	1.mean	1.sd	2.mean	2.sd	3.mean	3.sd	p.val_1.2
6M. SF36 - PCS	4.46	8.88	39.81	8.43	34.18	7.72	46.19	8.36	0.4354
1Y. SF36 - PCS	5.78	8.87	41.20	9.06	33.24	8.43	48.71	7.93	0.0284
2Y. SF36 - PCS	5.59	9.36	41.20	9.22	33.37	9.69	49.09	8.30	0.0335
5Y. SF36 - PCS	5.31	10.16	40.49	10.42	33.58	9.64	49.54	9.19	0.0834

	p.val_1.3	p.val_1.all	p.val_2.3	p.val_2.all	p.val_all
6M. SF36 - PCS	0.0000	0.0012	0.0004	0	0.0000
1Y. SF36 - PCS	0.0000	0.0012	0.1956	0	0.0002
2Y. SF36 - PCS	0.0002	0.0012	0.5765	0	0.0007
5Y. SF36 - PCS	0.0215	0.0012	0.6512	0	0.0531

[1] "SF36 - MCS"

	All.mean	All.sd	1.mean	1.sd	2.mean	2.sd	3.mean	3.sd	p.val_1.2
6M. SF36 - MCS	4.09	11.62	48.09	12.37	41.17	11.84	49.01	9.28	0.0244
1Y. SF36 - MCS	4.50	11.21	48.75	11.33	40.03	13.37	49.67	8.86	0.5384
2Y. SF36 - MCS	3.87	11.94	47.64	12.26	38.38	13.01	50.88	8.17	0.1560
5Y. SF36 - MCS	3.95	12.36	48.74	10.89	38.90	12.41	50.64	8.89	0.3576

	p.val_1.3	p.val_1.all	p.val_2.3	p.val_2.all	p.val_all
6M. SF36 - MCS	0.6948	0.0686	0.0675	0	0.0848
1Y. SF36 - MCS	0.8711	0.0686	0.6172	0	0.7555
2Y. SF36 - MCS	0.0483	0.0686	0.8704	0	0.0996
5Y. SF36 - MCS	0.0789	0.0686	0.6283	0	0.1943

Surgery

```
                                            All.mean  All.sd  1.mean     1.sd
Total Operative Blood Loss st1+st2+st3      1447.62  1262.72 1425.86  1325.97
Total surgical time st1+st2+st3              308.97   165.59  284.08   151.61
Number of Posterior Instrumented Levels        9.06     4.58    8.36     4.68
Number of Interbody Fusions                    0.80     1.16    1.05     1.18
                                            2.mean    2.sd  3.mean     3.sd
Total Operative Blood Loss st1+st2+st3      1875.30  1275.17 1152.39  966.75
Total surgical time st1+st2+st3              336.46   169.16  341.14  182.32
Number of Posterior Instrumented Levels        9.26     4.48   10.24    4.23
Number of Interbody Fusions                    0.98     1.08    0.18    0.94
                                           p.val_1.2 p.val_1.3 p.val_1.all
Total Operative Blood Loss st1+st2+st3        0.0192    0.0647      0.8534
Total surgical time st1+st2+st3               0.0303    0.0067      0.0691
Number of Posterior Instrumented Levels       0.1798    0.0006      0.0935
Number of Interbody Fusions                   0.6861    0.0000      0.0136
                                           p.val_2.3 p.val_2.all p.val_all
Total Operative Blood Loss st1+st2+st3        0.0004      0.0181    0.0037
Total surgical time st1+st2+st3               0.8665      0.2351    0.0056
Number of Posterior Instrumented Levels       0.1690      0.7521    0.0032
Number of Interbody Fusions                   0.0000      0.2106    0.0000


$`Pelvic fixation`
$`Pelvic fixation`$All
$`Pelvic fixation`$All$table
variable
 NA  No Yes
 24 214 134

$`Pelvic fixation`$All$proportion
variable
        NA         No        Yes
0.06451613 0.57526882 0.36021505


$`Pelvic fixation`$`1`
$`Pelvic fixation`$`1`$table
variable
 NA  No Yes
 13 102  90

$`Pelvic fixation`$`1`$proportion
variable
        NA         No        Yes
0.06341463 0.49756098 0.43902439


$`Pelvic fixation`$`2`
$`Pelvic fixation`$`2`$table
variable
 NA  No Yes
  3  22  38
```

```
$'Pelvic fixation'$'2'$proportion
variable
        NA        No       Yes
0.04761905 0.34920635 0.60317460


$'Pelvic fixation'$'3'
$'Pelvic fixation'$'3'$table
variable
 NA  No Yes
  8  90   6

$'Pelvic fixation'$'3'$proportion
variable
        NA        No       Yes
0.07692308 0.86538462 0.05769231



$'Surgical Approach'
$'Surgical Approach'$All
$'Surgical Approach'$All$table
variable
                 Anterior         Anterior-Posterior
                        1                          4
                Posterior         Posterior-Anterior
                      352                         11
       Posterior-Posterior Posterior-Posterior-Anterior
                        3                          1

$'Surgical Approach'$All$proportion
variable
                 Anterior         Anterior-Posterior
              0.002688172                0.010752688
                Posterior         Posterior-Anterior
              0.946236559                0.029569892
       Posterior-Posterior Posterior-Posterior-Anterior
              0.008064516                0.002688172


$'Surgical Approach'$'1'
$'Surgical Approach'$'1'$table
variable
         Anterior  Anterior-Posterior            Posterior Posterior-Anterior
                1                   2                  196                  4
Posterior-Posterior
                2

$'Surgical Approach'$'1'$proportion
variable
         Anterior  Anterior-Posterior            Posterior Posterior-Anterior
      0.004878049         0.009756098          0.956097561        0.019512195
Posterior-Posterior
      0.009756098
```

```
$'Surgical Approach'$'2'
$'Surgical Approach'$'2'$table
variable
        Posterior Posterior-Anterior
               56                7

$'Surgical Approach'$'2'$proportion
variable
        Posterior Posterior-Anterior
        0.8888889         0.1111111


$'Surgical Approach'$'3'
$'Surgical Approach'$'3'$table
variable
         Anterior-Posterior                  Posterior
                          2                        100
        Posterior-Posterior Posterior-Posterior-Anterior
                          1                          1

$'Surgical Approach'$'3'$proportion
variable
         Anterior-Posterior                  Posterior
                0.019230769                0.961538462
        Posterior-Posterior Posterior-Posterior-Anterior
                0.009615385                0.009615385



$Decompression
$Decompression$All
$Decompression$All$table
variable
 No Yes
274  98

$Decompression$All$proportion
variable
       No       Yes
0.7365591 0.2634409


$Decompression$'1'
$Decompression$'1'$table
variable
 No Yes
135  70

$Decompression$'1'$proportion
variable
       No       Yes
0.6585366 0.3414634
```

```
$Decompression$'2'
$Decompression$'2'$table
variable
 No Yes
 41  22


$Decompression$'2'$proportion
variable
       No       Yes
0.6507937 0.3492063



$Decompression$'3'
$Decompression$'3'$table
variable
 No Yes
 98   6

$Decompression$'3'$proportion
variable
        No        Yes
0.94230769 0.05769231



$'Interbody Fusion'
$'Interbody Fusion'$All
$'Interbody Fusion'$All$table
variable
 No Yes
216 156

$'Interbody Fusion'$All$proportion
variable
       No       Yes
0.5806452 0.4193548


$'Interbody Fusion'$'1'
$'Interbody Fusion'$'1'$table
variable
 No Yes
 90 115

$'Interbody Fusion'$'1'$proportion
variable
       No       Yes
0.4390244 0.5609756


$'Interbody Fusion'$'2'
$'Interbody Fusion'$'2'$table
```

```
variable
 No Yes
 28  35


$'Interbody Fusion'$'2'$proportion
variable
       No       Yes
0.4444444 0.5555556



$'Interbody Fusion'$'3'
$'Interbody Fusion'$'3'$table
variable
 No Yes
 98    6

$'Interbody Fusion'$'3'$proportion
variable
        No        Yes
0.94230769 0.05769231




$Osteotomy
$Osteotomy$All
$Osteotomy$All$table
variable
 No Yes
201 171

$Osteotomy$All$proportion
variable
       No       Yes
0.5403226 0.4596774



$Osteotomy$'1'
$Osteotomy$'1'$table
variable
 No Yes
107  98

$Osteotomy$'1'$proportion
variable
       No       Yes
0.5219512 0.4780488



$Osteotomy$'2'
$Osteotomy$'2'$table
variable
 No Yes
 24  39
```

```
$Osteotomy$`2`$proportion
variable
       No       Yes
0.3809524 0.6190476


$Osteotomy$`3`
$Osteotomy$`3`$table
variable
 No Yes
 70  34

$Osteotomy$`3`$proportion
variable
       No       Yes
0.6730769 0.3269231



$`3CO`
$`3CO`$All
$`3CO`$All$table
variable
 No Yes
318  54

$`3CO`$All$proportion
variable
       No       Yes
0.8548387 0.1451613


$`3CO`$`1`
$`3CO`$`1`$table
variable
 No Yes
174  31

$`3CO`$`1`$proportion
variable
       No       Yes
0.8487805 0.1512195


$`3CO`$`2`
$`3CO`$`2`$table
variable
 No Yes
 45  18

$`3CO`$`2`$proportion
variable
       No       Yes
0.7142857 0.2857143
```

```
$'3CO'$'3'
$'3CO'$'3'$table
variable
 No Yes
 99   5


$'3CO'$'3'$proportion
variable
        No        Yes
0.95192308 0.04807692
```

Reinterventions

```
   group reiqs patients total
1:     1   124       63   205
2:     2    71       29    63
3:     3    19       13   104
4:   all   214      105   372


   p_val_all_1 p_val_all_2 p_val_all_3 p_val_1_2 p_val_1_3 p_val_2_3
1:      0.5903      0.0073      0.0016     0.037     7e-04         0
```

Impacts

```
   Complication Impact all_num all_patients 1_num 1_patients 2_num 2_patients
1:                    0       1            1     0          0     1          1
2:        Adverse Event      6            5     2          2     0          0
3:  Major Complication    251          113   153         67    77         31
4:  Minor Complication    271          175   173        106    63         41
   3_num 3_patients all   1  2   3 p_val_all_1 p_val_all_2 p_val_all_3
1:     0          0 372 205 63 104      1.0000      0.6719      1.0000
2:     4          3 372 205 63 104      1.0000      0.7745      0.5164
3:    21         15 372 205 63 104      0.6323      0.0052      0.0018
4:    35         28 372 205 63 104      0.3242      0.0120      0.0004
   p_val_1_2 p_val_1_3 p_val_2_3
1:    0.5314       NaN    0.7995
2:    1.0000    0.4356    0.4476
3:    0.0256    0.0010    0.0000
4:    0.0853    0.0001    0.0000
```

Categories

```
           Category of the complication all_num all_patients 1_num 1_patients
1:     Central neurologic complications       1            1     1          1
2:                          Iatrogenic      74           65    44         38
3:            Infectious complications      36           30    17         15
4:            Mechanical complications     224          135   130         79
```

```
5:                    Other complications    124         80   83        47
6:                                   Pain     19         18   15        14
7: Peripheral neurologic complications     51         43   38        31
   2_num 2_patients 3_num 3_patients all   1  2   3 p_val_all_1 p_val_all_2
1:     0          0     0          0 372 205 63 104      1.0000      1.0000
2:    17         14    13         13 372 205 63 104      0.8370      0.4669
3:    13         10     6          5 372 205 63 104      0.8743      0.0805
4:    76         41    18         15 372 205 63 104      0.6566      0.0000
5:    22         18    19         15 372 205 63 104      0.7722      0.2808
6:     2          2     2          2 372 205 63 104      0.4180      0.7964
7:    11         10     2          2 372 205 63 104      0.2736      0.4474
   p_val_all_3 p_val_1_2 p_val_1_3 p_val_2_3
1:      1.0000    1.0000    1.0000       NaN
2:      0.2885    0.6420    0.2346    0.1506
3:      0.3615    0.0727    0.5468    0.0320
4:      0.0000    0.0004    0.0000    0.0000
5:      0.1446    0.4556    0.1066    0.0429
6:      0.3013    0.4432    0.1170    1.0000
7:      0.0054    1.0000    0.0008    0.0021
```