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
```

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_2.3	p.val_all
Age	0.0000	0.0000
Height (cm)_First Visit	0.0191	0.0131
Weight (kgs)_First Visit	0.0000	0.0000
BMI_First Visit	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'
$'Surgical Approach'$'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_2.3
Static Major curve Cobb angle        58.24 20.02    0.0343    0.0000         0
6W. Static Major curve Cobb angle    29.73 18.82    0.0021    0.0004         0
6M. Static Major curve Cobb angle    30.82 20.23    0.2925    0.0000         0
1Y. Static Major curve Cobb angle    26.41 17.98    0.0006    0.0039         0
2Y. Static Major curve Cobb angle    29.50 20.24    0.0629    0.0006         0
5Y. Static Major curve Cobb angle    35.48 19.38    0.0009    0.0031         0
                                     p.val_all
Static Major curve Cobb angle            0
6W. Static Major curve Cobb angle        0
6M. Static Major curve Cobb angle        0
1Y. Static Major curve Cobb angle        0
2Y. Static Major curve Cobb angle        0
5Y. Static Major curve Cobb angle        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_2.3
Coronal Balance (C7PL to CSVL)       19.08 14.20    0.0464    0.1559    0.0098
6W. Coronal Balance (C7PL to CSVL)   18.61 13.91    0.9094    0.2816    0.3487
6M. Coronal Balance (C7PL to CSVL)   14.68 10.88    0.1859    0.0074    0.0051
1Y. Coronal Balance (C7PL to CSVL)   15.27 11.02    0.3103    0.0547    0.0456
2Y. Coronal Balance (C7PL to CSVL)   14.11 11.76    0.2598    0.0161    0.0105
5Y. Coronal Balance (C7PL to CSVL)   14.39 11.26    0.2868    0.0009    0.1098
                                    p.val_all
Coronal Balance (C7PL to CSVL)        0.0022
6W. Coronal Balance (C7PL to CSVL)    0.5238
6M. Coronal Balance (C7PL to CSVL)    0.0044
1Y. Coronal Balance (C7PL to CSVL)    0.0440
2Y. Coronal Balance (C7PL to CSVL)    0.0138
5Y. Coronal Balance (C7PL to CSVL)    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_2.3 p.val_all
Sagittal Balance     0.0000         0         0         0
6W. Sagittal Balance 0.0528         0         0         0
6M. Sagittal Balance 0.0402         0         0         0
1Y. Sagittal Balance 0.0030         0         0         0
2Y. Sagittal Balance 0.0003         0         0         0
5Y. Sagittal Balance 0.0260         0         0         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_2.3 p.val_all
Sagittal T2-T5       0.7345    0.9965    0.7605    0.9352
6W. Sagittal T2-T5   0.4266    0.9472    0.4369    0.6332
6M. Sagittal T2-T5   0.7934    0.8609    0.7124    0.9245
1Y. Sagittal T2-T5   0.3417    0.0589    0.7822    0.1863
2Y. Sagittal T2-T5   0.0498    0.0077    0.9924    0.0127
5Y. Sagittal T2-T5   0.4150    0.5673    0.6893    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_2.3 p.val_all
Sagittal T5-T12       0.7588    0.0464    0.1970    0.1114
6W. Sagittal T5-T12   0.6017    0.0096    0.0114    0.0108
6M. Sagittal T5-T12   0.4915    0.0078    0.0089    0.0083
1Y. Sagittal T5-T12   0.5383    0.0118    0.0141    0.0173
2Y. Sagittal T5-T12   0.5785    0.0004    0.0273    0.0044
5Y. Sagittal T5-T12   0.3310    0.0249    0.0081    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_2.3 p.val_all
Sagittal T2-T12       0.5546    0.1324    0.5174    0.3042
6W. Sagittal T2-T12   0.3012    0.0050    0.0024    0.0021
6M. Sagittal T2-T12   0.2053    0.0347    0.0117    0.0137
1Y. Sagittal T2-T12   0.3932    0.0636    0.0401    0.0654
2Y. Sagittal T2-T12   0.1970    0.2833    0.0484    0.1077
5Y. Sagittal T2-T12   0.7182    0.0285    0.0817    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_2.3	p.val_all
Lordosis (top of L1-S1)	18.14	0.0050	0.0000	0.0000	0.0000
6W. Lordosis (top of L1-S1)	13.40	0.9016	0.0376	0.1300	0.1032
6M. Lordosis (top of L1-S1)	12.64	0.1417	0.0005	0.0006	0.0001
1Y. Lordosis (top of L1-S1)	13.11	0.2514	0.0009	0.0014	0.0006
2Y. Lordosis (top of L1-S1)	12.56	0.1664	0.0011	0.0003	0.0004
5Y. Lordosis (top of L1-S1)	15.57	0.8435	0.0209	0.0839	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_2.3	p.val_all
Pelvic Incidence	0.7701	0.0018	0.0134	0.0075
6W. Pelvic Incidence	0.6755	0.0008	0.0064	0.0033
6M. Pelvic Incidence	0.8098	0.0085	0.1158	0.0430
1Y. Pelvic Incidence	0.2699	0.0109	0.0045	0.0090
2Y. Pelvic Incidence	0.3915	0.0121	0.0095	0.0147
5Y. Pelvic Incidence	0.1437	0.5288	0.0644	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_2.3 p.val_all
Pelvic Tilt             0         0         0
6W. Pelvic Tilt         0         0         0
6M. Pelvic Tilt         0         0         0
1Y. Pelvic Tilt         0         0         0
2Y. Pelvic Tilt         0         0         0
5Y. Pelvic Tilt         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_2.3 p.val_all
Sacral Slope        0.0298    0.0000    0.0000    0.0000
6W. Sacral Slope    0.3953    0.0681    0.0553    0.0800
6M. Sacral Slope    0.0497    0.0001    0.0000    0.0000
1Y. Sacral Slope    0.4930    0.0007    0.0021    0.0009
2Y. Sacral Slope    0.4327    0.0013    0.0028    0.0016
5Y. Sacral Slope    0.7421    0.0001    0.0088    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_2.3	p.val_all
RLL	0.0000	0.0000	0.000
6W. RLL	0.0000	0.0003	0.000
6M. RLL	0.0000	0.0000	0.000
1Y. RLL	0.0000	0.0000	0.000
2Y. RLL	0.0000	0.0000	0.000
5Y. RLL	0.0052	0.0037	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_2.3	p.val_all
Global Tilt	0.0001	0	0	0
6W. Global Tilt	0.0843	0	0	0
6M. Global Tilt	0.0547	0	0	0
1Y. Global Tilt	0.0027	0	0	0
2Y. Global Tilt	0.0048	0	0	0
5Y. Global Tilt	0.0405	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_2.3	p.val_all
T1 Sagittal Tilt	0.0002	0.0000	0.0000	0.0000
6W. T1 Sagittal Tilt	0.9776	0.1143	0.2714	0.2959
6M. T1 Sagittal Tilt	0.0630	0.0698	0.0043	0.0057
1Y. T1 Sagittal Tilt	0.0427	0.1176	0.0030	0.0093
2Y. T1 Sagittal Tilt	0.0305	0.0005	0.0001	0.0000
5Y. T1 Sagittal Tilt	0.0811	0.2096	0.0059	0.0584

```
      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_2.3	p.val_all
Thoracolumbar L2-T10	0.6594	0.1930	0.1531	0.2903
6W. Thoracolumbar L2-T10	0.4764	0.0032	0.0017	0.0028
6M. Thoracolumbar L2-T10	0.8864	0.0007	0.0025	0.0003
1Y. Thoracolumbar L2-T10	0.8940	0.0000	0.0004	0.0000
2Y. Thoracolumbar L2-T10	0.7050	0.0008	0.0022	0.0011
5Y. Thoracolumbar L2-T10	0.6059	0.0144	0.0114	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_2.3	p.val_all
RSA	0	0	0
6W.RSA	0	0	0
6M.RSA	0	0	0
1Y.RSA	0	0	0
2Y.RSA	0	0	0
5Y.RSA	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_2.3	p.val_all
RPV	0	0
6W.RPV	0	0
6M.RPV	0	0
1Y.RPV	0	0
2Y.RPV	0	0
5Y.RPV	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_2.3	p.val_all
ODI - Score (%)	0	0	0	0
6M. ODI - Score (%)	0	0	0	0
1Y. ODI - Score (%)	0	0	0	0
2Y. ODI - Score (%)	0	0	0	0
5Y. ODI - Score (%)	0	0	0	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_2.3	p.val_all
SRS22 - Function / Activity	0.70	0	0	0	0
6M. SRS22 - Function / Activity	0.79	0	0	0	0
1Y. SRS22 - Function / Activity	0.73	0	0	0	0
2Y. SRS22 - Function / Activity	0.66	0	0	0	0
5Y. SRS22 - Function / Activity	0.78	0	0	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_2.3	p.val_all
SRS22 - Pain	0.0000	0	0
6M. SRS22 - Pain	0.0068	0	0
1Y. SRS22 - Pain	0.0000	0	0
2Y. SRS22 - Pain	0.0000	0	0
5Y. SRS22 - Pain	0.0000	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_2.3
SRS22 - Self image / Appearance	2.84	0.70	0e+00	0e+00	0
6M. SRS22 - Self image / Appearance	3.82	0.71	1e-04	2e-04	0
1Y. SRS22 - Self image / Appearance	3.91	0.67	0e+00	0e+00	0
2Y. SRS22 - Self image / Appearance	3.95	0.76	0e+00	0e+00	0
5Y. SRS22 - Self image / Appearance	3.90	0.74	0e+00	0e+00	0

	p.val_all
SRS22 - Self image / Appearance	0
6M. SRS22 - Self image / Appearance	0
1Y. SRS22 - Self image / Appearance	0
2Y. SRS22 - Self image / Appearance	0
5Y. SRS22 - Self image / Appearance	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_2.3	p.val_all
SRS22 - Mental health	0	0.0070	0	0
6M. SRS22 - Mental health	0	0.0509	0	0
1Y. SRS22 - Mental health	0	0.0250	0	0
2Y. SRS22 - Mental health	0	0.0253	0	0
5Y. SRS22 - Mental health	0	0.0165	0	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_2.3	p.val_all
SRS22 - SRS Subtotal score	0.56	0	0	0	0
6M. SRS22 - SRS Subtotal score	0.58	0	0	0	0
1Y. SRS22 - SRS Subtotal score	0.53	0	0	0	0
2Y. SRS22 - SRS Subtotal score	0.56	0	0	0	0
5Y. SRS22 - SRS Subtotal score	0.67	0	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 0.0003 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] "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_2.3 p.val_all
SF36 - PCS           0         0         0
6M. SF36 - PCS       0         0         0
1Y. SF36 - PCS       0         0         0
2Y. SF36 - PCS       0         0         0
5Y. SF36 - PCS       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_2.3 p.val_all
SF36 - MCS      0.9377     0e+00     0e+00
6M. SF36 - MCS  0.4961     1e-04     1e-04
1Y. SF36 - MCS  0.4584     0e+00     0e+00
2Y. SF36 - MCS  0.0094     0e+00     0e+00
5Y. SF36 - MCS  0.1917     0e+00     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
```

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_2.3	p.val_all
Total Operative Blood Loss st1+st2+st3	0.0192	0.0647	0.0004	0.0037
Total surgical time st1+st2+st3	0.0303	0.0067	0.8665	0.0056
Number of Posterior Instrumented Levels	0.1798	0.0006	0.1690	0.0032
Number of Interbody Fusions	0.6861	0.0000	0.0000	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     1          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
```