

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 66
2:       2 139
3:       3 63
4:       4 104
```

Demographics

	variable	All.mean	All.sd	1.mean	1.sd
Age	Age	52.42	19.39	68.85	9.14
Height (cm)_First Visit	Height (cm)_First Visit	163.08	9.41	162.62	8.51
Weight (kgs)_First Visit	Weight (kgs)_First Visit	65.62	13.01	67.65	13.67
BMI_First Visit	BMI_First Visit	24.69	4.57	25.50	4.49
	2.mean 2.sd 3.mean 3.sd 4.mean 4.sd p.val_1.2				
Age	56.47 15.43 63.22 10.37 30.03 12.07				0.0000
Height (cm)_First Visit	162.43 8.21 161.35 10.24 165.28 10.59				0.8848
Weight (kgs)_First Visit	63.91 10.39 72.59 11.91 62.41 14.67				0.0536
BMI_First Visit	24.27 3.94 27.98 4.61 22.75 4.25				0.0617
	p.val_1.3 p.val_1.4 p.val_2.3 p.val_2.4 p.val_3.4				
Age	0.0014 0.0000 0.0004 0.0000 0.0000				0.0000
Height (cm)_First Visit	0.4491 0.0740 0.4621 0.0239 0.0191				0.0191
Weight (kgs)_First Visit	0.0310 0.0199 0.0000 0.3737 0.0000				0.0000
BMI_First Visit	0.0025 0.0001 0.0000 0.0047 0.0000				0.0000
	p.val_all				
Age	0.000				
Height (cm)_First Visit	0.034				
Weight (kgs)_First Visit	0.000				
BMI_First Visit	0.000				

\$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
49	17

\$Gender\$'1'\$proportion
variable

Female	Male
0.7424242	0.2575758

\$Gender\$'2'
\$Gender\$'2'\$table
variable

Female	Male
119	20

\$Gender\$'2'\$proportion
variable

Female	Male
0.8561151	0.1438849

\$Gender\$'3'
\$Gender\$'3'\$table
variable

Female	Male
49	14

\$Gender\$'3'\$proportion
variable

Female	Male
0.7777778	0.2222222

\$Gender\$'4'
\$Gender\$'4'\$table
variable

Female	Male
74	30

\$Gender\$'4'\$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
41 25

\$'Prior Spine Surgery'\$'1'\$proportion
variable
No Yes
0.6212121 0.3787879

\$'Prior Spine Surgery'\$'2'
\$'Prior Spine Surgery'\$'2'\$table
variable
No Yes
98 41

\$'Prior Spine Surgery'\$'2'\$proportion
variable
No Yes
0.705036 0.294964

\$'Prior Spine Surgery'\$'3'
\$'Prior Spine Surgery'\$'3'\$table
variable
No Yes
29 34

\$'Prior Spine Surgery'\$'3'\$proportion
variable
No Yes
0.4603175 0.5396825

\$'Prior Spine Surgery'\$'4'

```

$'Prior Spine Surgery'$'4'$table
variable
  No Yes
  87 17

```

```

$'Prior Spine Surgery'$'4'$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
  7 43 16

```

```

$'ASA classification'$'1'$proportion
variable
      1      2      3
0.1060606 0.6515152 0.2424242

```

```

$'ASA classification'$'2'
$'ASA classification'$'2'$table
variable
  1  2  3
32 86 21

```

```

$'ASA classification'$'2'$proportion
variable
      1      2      3
0.2302158 0.6187050 0.1510791

```

```

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

```

```

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

```

```

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

```

```

$'ASA classification'$'4'$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
      8      13      45

```

```

$'Tobacco use_First Visit'$'1'$proportion
variable
  Current      Ex Non-User
0.1212121 0.1969697 0.6818182

```

```

$'Tobacco use_First Visit'$'2'
$'Tobacco use_First Visit'$'2'$table
variable
  Current      Ex Non-User
      32      30      77

```

```

$'Tobacco use_First Visit'$'2'$proportion
variable
  Current      Ex Non-User

```

0.2302158 0.2158273 0.5539568

```
$'Tobacco use_First Visit'$'3'
$'Tobacco use_First Visit'$'3'$table
variable
  Current      Ex Non-User
      14         7      42
```

```
$'Tobacco use_First Visit'$'3'$proportion
variable
  Current      Ex Non-User
0.2222222 0.1111111 0.6666667
```

```
$'Tobacco use_First Visit'$'4'
$'Tobacco use_First Visit'$'4'$table
variable
  Current      Ex Non-User
      20        17      67
```

```
$'Tobacco use_First Visit'$'4'$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
```

Degenerative	Failed-back	Idiopathic	Neuromuscular	Post-traumatic
46	7	10	1	2

```
$'ESSG Diagnosis'$'1'$proportion
```

```
variable
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Degenerative	Failed-back	Idiopathic	Neuromuscular	Post-traumatic
0.69696970	0.10606061	0.15151515	0.01515152	0.03030303

```
$'ESSG Diagnosis'$'2'
```

```
$'ESSG Diagnosis'$'2'$table
```

```
variable
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Congenital	Degenerative
1	50
Failed-back	Idiopathic
5	68
Neuromuscular	Other: Ankylosing spondylitis
1	1
Other: hyperkyphosis	Other: spondylolisthesis
1	1
Post-traumatic	Scheuermann
5	4
Syndromic	
2	

```
$'ESSG Diagnosis'$'2'$proportion
```

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variable
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Congenital	Degenerative
0.007194245	0.359712230
Failed-back	Idiopathic
0.035971223	0.489208633
Neuromuscular	Other: Ankylosing spondylitis
0.007194245	0.007194245
Other: hyperkyphosis	Other: spondylolisthesis
0.007194245	0.007194245
Post-traumatic	Scheuermann
0.035971223	0.028776978
Syndromic	
0.014388489	

```
$'ESSG Diagnosis'$'3'
```

```
$'ESSG Diagnosis'$'3'$table
```

```
variable
```

Congenital	Degenerative	Failed-back	Idiopathic	Neuromuscular
2	35	7	10	2
Post-traumatic	Scheuermann			
6	1			

'\$ESSG Diagnosis'\$'3'\$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'\$'4'
 '\$ESSG Diagnosis'\$'4'\$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'\$'4'\$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

Posterior	Posterior-Anterior	Posterior-Posterior
61	4	1

\$'Surgical Approach'\$'1'\$proportion

variable

Posterior	Posterior-Anterior	Posterior-Posterior
0.92424242	0.06060606	0.01515152

\$'Surgical Approach'\$'2'

\$'Surgical Approach'\$'2'\$table

variable

Anterior	Anterior-Posterior	Posterior	Posterior-Posterior
1	2	135	1

\$'Surgical Approach'\$'2'\$proportion

variable

Anterior	Anterior-Posterior	Posterior	Posterior-Posterior
0.007194245	0.014388489	0.971223022	0.007194245

\$'Surgical Approach'\$'3'

\$'Surgical Approach'\$'3'\$table

variable

Posterior	Posterior-Anterior
56	7

\$'Surgical Approach'\$'3'\$proportion

variable

Posterior	Posterior-Anterior
0.8888889	0.1111111

\$'Surgical Approach'\$'4'

\$'Surgical Approach'\$'4'\$table

variable

Anterior-Posterior	Posterior
2	100
Posterior-Posterior	Posterior-Posterior-Anterior
1	1

\$'Surgical Approach'\$'4'\$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	33.57	17.10	39.93	17.98
6W. Static Major curve Cobb angle	23.00	16.25	19.68	14.27	22.54	14.81
6M. Static Major curve Cobb angle	23.05	17.22	17.52	12.27	21.77	15.49
1Y. Static Major curve Cobb angle	20.74	16.11	17.40	14.46	21.09	15.96
2Y. Static Major curve Cobb angle	22.52	17.11	17.11	13.71	22.21	15.37
5Y. Static Major curve Cobb angle	25.54	17.29	17.46	10.22	26.74	16.96
	3.mean	3.sd	4.mean	4.sd	p.val_1.2	p.val_1.3
Static Major curve Cobb angle	31.68	20.00	58.24	20.02	0.0192	0.5772
6W. Static Major curve Cobb angle	15.42	11.56	29.73	18.82	0.2262	0.0948
6M. Static Major curve Cobb angle	17.86	14.98	30.82	20.23	0.0573	0.9037
1Y. Static Major curve Cobb angle	13.61	10.38	26.41	17.98	0.1316	0.1204
2Y. Static Major curve Cobb angle	16.39	13.18	29.50	20.24	0.0475	0.7933
5Y. Static Major curve Cobb angle	15.43	9.49	35.48	19.38	0.0056	0.4885
	p.val_1.4	p.val_2.3	p.val_2.4	p.val_3.4		
Static Major curve Cobb angle	0.0000	0.0075	0.0000		0	
6W. Static Major curve Cobb angle	0.0004	0.0011	0.0029		0	
6M. Static Major curve Cobb angle	0.0000	0.1348	0.0006		0	
1Y. Static Major curve Cobb angle	0.0011	0.0003	0.0246		0	
2Y. Static Major curve Cobb angle	0.0001	0.0176	0.0075		0	
5Y. Static Major curve Cobb angle	0.0000	0.0002	0.0272		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	4	All
1: Preop 2Y	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2: Preop 5Y	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3: Preop 6W	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4: 6W 2Y	0.3607	0.8744	0.6962	0.9397	0.7258		
5: 6W 5Y	0.4614	0.1141	0.9974	0.1254	0.1398		
6: 2Y 5Y	0.9103	0.1013	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	36.26	17.12	14.52	10.98
6W. Coronal Balance (C7PL to CSVL)	20.14	15.06	21.83	16.64	20.21	15.43
6M. Coronal Balance (C7PL to CSVL)	18.59	14.71	19.38	16.00	19.20	14.24
1Y. Coronal Balance (C7PL to CSVL)	18.02	13.84	19.63	13.22	17.86	12.91
2Y. Coronal Balance (C7PL to CSVL)	18.12	15.53	19.73	17.80	18.21	13.68
5Y. Coronal Balance (C7PL to CSVL)	20.81	17.32	28.69	22.70	22.68	17.95

	3.mean	3.sd	4.mean	4.sd	p.val_1.2
Coronal Balance (C7PL to CSVL)	30.02	29.64	19.08	14.20	0.0000
6W. Coronal Balance (C7PL to CSVL)	21.00	14.80	18.61	13.91	0.5654
6M. Coronal Balance (C7PL to CSVL)	23.15	18.44	14.68	10.88	0.9447
1Y. Coronal Balance (C7PL to CSVL)	21.43	19.15	15.27	11.02	0.4477
2Y. Coronal Balance (C7PL to CSVL)	22.14	19.70	14.11	11.76	0.6166
5Y. Coronal Balance (C7PL to CSVL)	20.21	16.21	14.39	11.26	0.2940

	p.val_1.3	p.val_1.4	p.val_2.3	p.val_2.4
Coronal Balance (C7PL to CSVL)	0.1613	0.0000	0.0002	0.0109
6W. Coronal Balance (C7PL to CSVL)	0.7912	0.2541	0.7572	0.4498
6M. Coronal Balance (C7PL to CSVL)	0.2853	0.0728	0.1917	0.0149
1Y. Coronal Balance (C7PL to CSVL)	0.5962	0.0618	0.2441	0.1435
2Y. Coronal Balance (C7PL to CSVL)	0.5278	0.0648	0.2061	0.0407
5Y. Coronal Balance (C7PL to CSVL)	0.1619	0.0140	0.5289	0.0075

	p.val_3.4	p.val_all
Coronal Balance (C7PL to CSVL)	0.0098	0.0000
6W. Coronal Balance (C7PL to CSVL)	0.3487	0.6419
6M. Coronal Balance (C7PL to CSVL)	0.0051	0.0127
1Y. Coronal Balance (C7PL to CSVL)	0.0456	0.0797
2Y. Coronal Balance (C7PL to CSVL)	0.0105	0.0315
5Y. Coronal Balance (C7PL to CSVL)	0.1098	0.0167

	t0	t1	1	2	3	4	All
1: Preop 2Y	0.0000	0.0347	0.0986	0.0150	0.0023		
2: Preop 5Y	0.1816	0.0026	0.0497	0.0489	0.3511		
3: Preop 6W	0.0000	0.0018	0.0419	0.8216	0.0873		
4: 6W 2Y	0.5565	0.3358	0.7386	0.0286	0.1213		
5: 6W 5Y	0.2309	0.3870	0.8319	0.0775	0.6961		
6: 2Y 5Y	0.1279	0.1150	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	107.98	58.77	21.11	37.82	93.82	59.04
6W. Sagittal Balance	18.93	37.88	42.78	36.39	15.96	34.39	35.93	38.41
6M. Sagittal Balance	16.75	44.68	35.65	47.96	15.30	39.31	38.57	52.33
1Y. Sagittal Balance	19.20	48.86	49.55	45.24	11.96	41.47	49.10	54.00
2Y. Sagittal Balance	24.55	49.64	55.12	44.50	15.51	38.52	60.15	54.87
5Y. Sagittal Balance	34.29	48.85	63.31	60.57	29.78	42.75	61.98	43.51

	4.mean	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3
Sagittal Balance	-4.12	31.08	0.0000	0.1868	0e+00	0.0000
6W. Sagittal Balance	-1.75	29.89	0.0000	0.3551	0e+00	0.0016
6M. Sagittal Balance	-4.90	32.59	0.0111	0.7720	0e+00	0.0061
1Y. Sagittal Balance	-7.66	36.15	0.0000	0.9642	0e+00	0.0000

2Y. Sagittal Balance	-6.29	34.07	0.0000	0.6235	0e+00	0.0000
5Y. Sagittal Balance	5.35	33.89	0.0272	0.9330	4e-04	0.0025
	p.val_2.4	p.val_3.4	p.val_all			
Sagittal Balance	0.0000	0	0			
6W. Sagittal Balance	0.0002	0	0			
6M. Sagittal Balance	0.0001	0	0			
1Y. Sagittal Balance	0.0006	0	0			
2Y. Sagittal Balance	0.0002	0	0			
5Y. Sagittal Balance	0.0026	0	0			

	t0	t1	1	2	3	4	All
1: Preop 2Y	0.0000	0.2840	0.0022	0.6651	0.0002		
2: Preop 5Y	0.0059	0.1892	0.0063	0.1393	0.1640		
3: Preop 6W	0.0000	0.2684	0.0000	0.5995	0.0000		
4: 6W 2Y	0.1527	0.9305	0.0102	0.3729	0.1367		
5: 6W 5Y	0.1602	0.0371	0.0113	0.2700	0.0011		
6: 2Y 5Y	0.5857	0.0425	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	9.94	8.09	11.76	10.47	10.67	10.35
6W. Sagittal T2-T5	13.65	8.18	13.76	8.21	13.35	7.60	14.64	9.57
6M. Sagittal T2-T5	14.05	9.61	14.30	9.88	13.96	10.06	13.60	11.43
1Y. Sagittal T2-T5	13.92	9.59	13.31	9.64	12.84	9.23	14.70	11.87
2Y. Sagittal T2-T5	14.33	9.94	12.40	9.87	12.68	9.19	16.11	11.27
5Y. Sagittal T2-T5	15.76	11.63	14.15	11.13	15.22	10.41	17.54	15.18
	4.mean	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3		
Sagittal T2-T5	11.18	9.67	0.1890	0.6662	0.3888	0.5021		
6W. Sagittal T2-T5	13.40	8.08	0.7646	0.6175	0.8074	0.3936		
6M. Sagittal T2-T5	14.27	7.79	0.8437	0.7429	0.9852	0.8449		
1Y. Sagittal T2-T5	15.22	8.26	0.7722	0.5178	0.2521	0.3185		
2Y. Sagittal T2-T5	16.13	9.58	0.8719	0.0885	0.0416	0.0658		
5Y. Sagittal T2-T5	16.16	11.07	0.7025	0.3769	0.5067	0.4782		
	p.val_2.4	p.val_3.4	p.val_all					
Sagittal T2-T5	0.6670	0.7605	0.6693					
6W. Sagittal T2-T5	0.9607	0.4369	0.8016					
6M. Sagittal T2-T5	0.8098	0.7124	0.9779					
1Y. Sagittal T2-T5	0.0622	0.7822	0.3289					
2Y. Sagittal T2-T5	0.0156	0.9924	0.0330					
5Y. Sagittal T2-T5	0.6771	0.6893	0.7566					

	t0	t1	1	2	3	4	All
1: Preop 2Y	0.1753	0.4840	0.0098	0.0007	0.0001		
2: Preop 5Y	0.1220	0.0382	0.0391	0.0169	0.0000		
3: Preop 6W	0.0157	0.1711	0.0372	0.0928	0.0003		
4: 6W 2Y	0.4698	0.5745	0.4781	0.0464	0.3771		
5: 6W 5Y	0.8852	0.2301	0.3725	0.1673	0.0525		
6: 2Y 5Y	0.5410	0.1312	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	29.36	18.97	32.37	17.88	32.25	18.30
6W. Sagittal T5-T12	33.74	13.83	34.13	13.00	35.31	13.78	36.00	12.79
6M. Sagittal T5-T12	34.66	13.88	36.88	13.25	35.37	13.85	37.34	13.61
1Y. Sagittal T5-T12	35.43	13.85	39.10	12.11	35.34	14.54	37.85	13.79
2Y. Sagittal T5-T12	36.18	15.75	37.97	14.42	38.92	18.75	37.17	15.11
5Y. Sagittal T5-T12	40.10	16.53	43.78	14.27	40.65	16.49	44.81	15.15
	4.mean	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3		
Sagittal T5-T12	36.24	20.05	0.2974	0.3907	0.0309	0.9681		
6W. Sagittal T5-T12	30.05	14.48	0.5931	0.4545	0.0886	0.7510		
6M. Sagittal T5-T12	30.99	13.89	0.5067	0.8635	0.0139	0.3930		
1Y. Sagittal T5-T12	31.85	13.24	0.0920	0.6287	0.0018	0.2898		
2Y. Sagittal T5-T12	31.60	12.01	0.7395	0.7921	0.0125	0.5424		
5Y. Sagittal T5-T12	33.92	17.33	0.4151	0.8086	0.0220	0.2524		
	p.val_2.4	p.val_3.4	p.val_all					
Sagittal T5-T12	0.1274	0.1970	0.1407					
6W. Sagittal T5-T12	0.0096	0.0114	0.0254					
6M. Sagittal T5-T12	0.0259	0.0089	0.0186					
1Y. Sagittal T5-T12	0.0826	0.0141	0.0137					
2Y. Sagittal T5-T12	0.0020	0.0273	0.0119					
5Y. Sagittal T5-T12	0.0601	0.0081	0.0297					

	t0	t1	1	2	3	4	All
1: Preop 2Y	0.0089	0.0085	0.1204	0.0545	0.0174		
2: Preop 5Y	0.0007	0.0024	0.0012	0.4995	0.0000		
3: Preop 6W	0.1180	0.1426	0.1985	0.0157	0.5127		
4: 6W 2Y	0.1716	0.1222	0.6677	0.4452	0.0475		
5: 6W 5Y	0.0111	0.0380	0.0113	0.2281	0.0001		
6: 2Y 5Y	0.1310	0.5548	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	35.77	21.37	39.91	18.45	40.27	19.30
6W. Sagittal T2-T12	43.16	15.31	42.13	15.63	45.48	13.82	46.84	14.87
6M. Sagittal T2-T12	44.77	15.26	47.31	15.20	44.54	14.32	48.90	17.79
1Y. Sagittal T2-T12	44.92	15.31	47.78	15.21	44.57	14.92	47.84	17.38
2Y. Sagittal T2-T12	45.64	15.57	44.82	15.52	45.98	15.51	49.21	17.78
5Y. Sagittal T2-T12	49.45	16.87	51.21	14.13	50.95	15.89	52.61	20.93
	4.mean	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3		
Sagittal T2-T12	42.32	20.29	0.1901	0.2191	0.0553	0.9033		
6W. Sagittal T2-T12	38.61	16.22	0.1877	0.1154	0.2055	0.5738		
6M. Sagittal T2-T12	41.43	14.35	0.2734	0.6298	0.0254	0.1275		
1Y. Sagittal T2-T12	41.95	14.10	0.2192	0.9843	0.0304	0.2416		
2Y. Sagittal T2-T12	43.46	13.96	0.6810	0.1953	0.6237	0.2697		
5Y. Sagittal T2-T12	44.13	15.89	0.9450	0.7829	0.0835	0.7160		
	p.val_2.4	p.val_3.4	p.val_all					
Sagittal T2-T12	0.3510	0.5174	0.2339					
6W. Sagittal T2-T12	0.0016	0.0024	0.0028					
6M. Sagittal T2-T12	0.1208	0.0117	0.0208					

1Y. Sagittal T2-T12	0.2091	0.0401	0.0733
2Y. Sagittal T2-T12	0.2518	0.0484	0.2019
5Y. Sagittal T2-T12	0.0423	0.0817	0.1380

	t0	t1	1	2	3	4	All
1: Preop 2Y	0.0126	0.0074	0.0107	0.6540	0.0000		
2: Preop 5Y	0.0004	0.0001	0.0118	0.5795	0.0000		
3: Preop 6W	0.0696	0.0070	0.0400	0.1639	0.0172		
4: 6W 2Y	0.3984	0.8093	0.4567	0.0353	0.0527		
5: 6W 5Y	0.0206	0.0293	0.2077	0.0759	0.0002		
6: 2Y 5Y	0.1049	0.0617	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	-29.95	17.51	-45.68	17.08	-32.81
6W. Lordosis (top of L1-S1)	-51.20	14.22	-46.98	15.43	-51.76	13.28	-49.95
6M. Lordosis (top of L1-S1)	-50.88	14.30	-48.14	15.11	-50.59	12.88	-46.07
1Y. Lordosis (top of L1-S1)	-51.16	14.46	-45.60	14.29	-51.92	13.30	-47.19
2Y. Lordosis (top of L1-S1)	-51.59	15.20	-45.47	17.65	-52.69	13.97	-46.87
5Y. Lordosis (top of L1-S1)	-50.64	15.97	-44.96	14.82	-49.87	16.53	-49.25
	3.sd	4.mean	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	
Lordosis (top of L1-S1)	19.24	-56.42	18.14	0.0000	0.3828	0.0000	
6W. Lordosis (top of L1-S1)	15.56	-53.79	13.40	0.0394	0.3074	0.0053	
6M. Lordosis (top of L1-S1)	17.04	-55.58	12.64	0.2920	0.5004	0.0023	
1Y. Lordosis (top of L1-S1)	16.62	-55.87	13.11	0.0070	0.5949	0.0000	
2Y. Lordosis (top of L1-S1)	16.23	-56.52	12.56	0.0157	0.6795	0.0003	
5Y. Lordosis (top of L1-S1)	14.85	-55.84	15.57	0.2135	0.3225	0.0108	
	p.val_2.3	p.val_2.4	p.val_3.4	p.val_all			
Lordosis (top of L1-S1)	0.0000	0.0000	0.0000	0.0000			
6W. Lordosis (top of L1-S1)	0.4554	0.2565	0.1300	0.0255			
6M. Lordosis (top of L1-S1)	0.0847	0.0042	0.0006	0.0003			
1Y. Lordosis (top of L1-S1)	0.0652	0.0322	0.0014	0.0001			
2Y. Lordosis (top of L1-S1)	0.0278	0.0477	0.0003	0.0000			
5Y. Lordosis (top of L1-S1)	0.8599	0.0734	0.0839	0.0658			

	t0	t1	1	2	3	4	All
1: Preop 2Y	0.0000	0.0005	0.0000	0.9617	0.0000		
2: Preop 5Y	0.0004	0.1087	0.0000	0.8520	0.0001		
3: Preop 6W	0.0000	0.0012	0.0000	0.2404	0.0000		
4: 6W 2Y	0.6426	0.6063	0.3172	0.1531	0.7430		
5: 6W 5Y	0.5982	0.4432	0.8430	0.4707	0.7105		
6: 2Y 5Y	0.9035	0.2736	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	60.40	14.17	52.87	12.45	55.85	13.73
6W. Pelvic Incidence	54.15	12.92	59.33	14.77	53.61	12.47	56.27	13.25
6M. Pelvic Incidence	53.99	12.65	58.78	14.37	53.55	12.11	54.70	13.44

1Y. Pelvic Incidence	53.66	12.57	56.77	13.28	53.36	12.59	56.59	12.86
2Y. Pelvic Incidence	53.75	12.42	57.54	14.20	53.19	11.90	56.40	13.54
5Y. Pelvic Incidence	54.90	12.41	55.60	14.69	54.09	12.34	58.62	12.57
	4.mean	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3		
Pelvic Incidence	50.68	11.14	0.0004	0.0671	0.0000	0.1447		
6W. Pelvic Incidence	50.37	10.77	0.0106	0.2460	0.0001	0.2103		
6M. Pelvic Incidence	51.26	10.99	0.0181	0.1249	0.0009	0.5937		
1Y. Pelvic Incidence	50.44	11.22	0.1144	0.9433	0.0045	0.1232		
2Y. Pelvic Incidence	50.67	10.43	0.0716	0.6799	0.0047	0.1459		
5Y. Pelvic Incidence	53.06	10.86	0.6769	0.4539	0.4908	0.1204		
	p.val_2.4	p.val_3.4	p.val_all					
Pelvic Incidence	0.1541	0.0134	0.0000					
6W. Pelvic Incidence	0.0381	0.0064	0.0002					
6M. Pelvic Incidence	0.1437	0.1158	0.0042					
1Y. Pelvic Incidence	0.0766	0.0045	0.0066					
2Y. Pelvic Incidence	0.1256	0.0095	0.0059					
5Y. Pelvic Incidence	0.6636	0.0644	0.2985					

	t0	t1	1	2	3	4	All
1: Preop 2Y	0.2950	0.8432	0.8289	0.9951	0.7170		
2: Preop 5Y	0.1980	0.5271	0.3499	0.2533	0.5238		
3: Preop 6W	0.6798	0.6253	0.8664	0.8408	0.9695		
4: 6W 2Y	0.5271	0.7906	0.9610	0.8467	0.6936		
5: 6W 5Y	0.3242	0.8059	0.4341	0.1964	0.5476		
6: 2Y 5Y	0.6137	0.6507	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	4.mean
Pelvic Tilt	21.99	10.97	30.59	8.22	21.31	10.44	27.72	8.21	13.63
6W. Pelvic Tilt	18.18	9.64	23.33	9.50	18.12	9.04	22.18	8.79	12.62
6M. Pelvic Tilt	19.60	10.05	25.06	8.12	19.75	9.65	24.40	9.47	13.25
1Y. Pelvic Tilt	19.40	10.25	25.08	7.97	19.19	10.40	24.32	8.30	13.18
2Y. Pelvic Tilt	19.25	9.43	25.05	7.61	19.30	8.63	24.20	8.37	12.91
5Y. Pelvic Tilt	21.93	9.91	25.75	8.28	22.95	9.05	27.04	8.52	14.67
	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3	p.val_2.4			
Pelvic Tilt	8.12	0.0000	0.0500	0	0.0000	0			
6W. Pelvic Tilt	8.05	0.0005	0.5032	0	0.0056	0			
6M. Pelvic Tilt	8.40	0.0002	0.6934	0	0.0036	0			
1Y. Pelvic Tilt	8.80	0.0001	0.6305	0	0.0006	0			
2Y. Pelvic Tilt	7.93	0.0001	0.5962	0	0.0009	0			
5Y. Pelvic Tilt	9.04	0.2017	0.5960	0	0.0448	0			
	p.val_3.4	p.val_all							
Pelvic Tilt	0	0							
6W. Pelvic Tilt	0	0							
6M. Pelvic Tilt	0	0							
1Y. Pelvic Tilt	0	0							
2Y. Pelvic Tilt	0	0							
5Y. Pelvic Tilt	0	0							

	t0	t1	1	2	3	4	All
1: Preop 2Y	0.0004	0.1084	0.0242	0.5468	0.0007		

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2: Preop 5Y 0.0258 0.2720 0.7262 0.5340 0.9521
3: Preop 6W 0.0000 0.0082 0.0007 0.3909 0.0000
4:      6W 2Y 0.3023 0.3141 0.2242 0.8084 0.1633
5:      6W 5Y 0.2750 0.0009 0.0186 0.2261 0.0001
6:      2Y 5Y 0.7422 0.0140 0.1555 0.3011 0.0072

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[1] "Sacral Slope"

	All.mean	All.sd	1.mean	1.sd	2.mean	2.sd	3.mean	3.sd	4.mean
Sacral Slope	32.56	11.12	30.19	11.42	32.27	11.04	28.08	11.06	37.22
6W. Sacral Slope	35.90	10.13	35.78	11.48	35.44	9.36	34.00	12.20	37.66
6M. Sacral Slope	34.37	10.03	33.55	12.00	33.61	9.26	30.28	10.78	38.16
1Y. Sacral Slope	34.30	9.66	31.47	10.15	34.12	9.22	32.28	9.93	37.47
2Y. Sacral Slope	34.58	10.38	32.58	12.03	34.02	9.35	32.18	11.37	37.83
5Y. Sacral Slope	32.97	10.72	29.85	11.40	31.14	10.28	31.58	10.66	38.42

	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3	p.val_2.4
Sacral Slope	9.39	0.2256	0.2941	0.0001	0.0142	0.0002
6W. Sacral Slope	8.79	0.8389	0.4240	0.2805	0.4385	0.0682
6M. Sacral Slope	7.97	0.9711	0.1341	0.0110	0.0528	0.0001
1Y. Sacral Slope	9.05	0.1050	0.6730	0.0006	0.2460	0.0086
2Y. Sacral Slope	9.23	0.4706	0.8625	0.0112	0.3092	0.0058
5Y. Sacral Slope	9.40	0.6504	0.5928	0.0057	0.8585	0.0005

	p.val_3.4	p.val_all
Sacral Slope	0.0000	0.0000
6W. Sacral Slope	0.0553	0.1652
6M. Sacral Slope	0.0000	0.0000
1Y. Sacral Slope	0.0021	0.0007
2Y. Sacral Slope	0.0028	0.0036
5Y. Sacral Slope	0.0088	0.0023

	t0	t1	1	2	3	4	All
1: Preop 2Y	0.2921	0.1858	0.0520	0.6573	0.0172		
2: Preop 5Y	0.9077	0.4928	0.1598	0.5022	0.7005		
3: Preop 6W	0.0075	0.0116	0.0075	0.7352	0.0000		
4: 6W 2Y	0.1670	0.2554	0.4246	0.9005	0.1096		
5: 6W 5Y	0.0481	0.0073	0.3578	0.6675	0.0053		
6: 2Y 5Y	0.3749	0.0799	0.8143	0.7453	0.1360		

[1] "RLL"

	All.mean	All.sd	1.mean	1.sd	2.mean	2.sd	3.mean	3.sd	4.mean	4.sd
RLL	-18.81	20.26	-36.57	13.35	-16.10	16.28	-30.81	18.11	-3.79	17.01
6W. RLL	-11.30	13.07	-18.84	12.86	-10.46	12.37	-13.94	12.33	-6.08	12.08
6M. RLL	-11.56	13.38	-17.09	11.83	-11.61	12.27	-16.63	15.43	-5.33	11.87
1Y. RLL	-11.22	13.90	-18.60	12.39	-10.16	13.08	-17.05	14.32	-4.54	12.13
2Y. RLL	-10.54	14.13	-18.88	13.86	-8.94	13.39	-17.09	13.93	-3.85	11.20
5Y. RLL	-12.40	14.34	-18.51	12.89	-12.66	14.11	-16.10	12.46	-6.05	14.70

	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3	p.val_2.4	p.val_3.4	p.val_all
RLL	0.0000	0.0441	0.0000	0.0000	0.0000	0.0000	0.0000
6W. RLL	0.0000	0.0401	0.0000	0.0848	0.0088	0.0003	0.0000

6M. RLL	0.0049	0.8616	0.0000	0.0385	0.0002	0.0000	0.0000
1Y. RLL	0.0001	0.5488	0.0000	0.0032	0.0016	0.0000	0.0000
2Y. RLL	0.0001	0.5241	0.0000	0.0006	0.0051	0.0000	0.0000
5Y. RLL	0.0898	0.5142	0.0014	0.2548	0.0297	0.0037	0.0033

	t0	t1	1	2	3	4	All
1: Preop	2Y	0.0000	0.0002	0.0000	0.9746	0.0000	
2: Preop	5Y	0.0000	0.1371	0.0000	0.4366	0.0001	
3: Preop	6W	0.0000	0.0015	0.0000	0.2780	0.0000	
4:	6W 2Y	0.9898	0.3748	0.2156	0.2026	0.4850	
5:	6W 5Y	0.9198	0.3047	0.4589	0.9925	0.4275	
6:	2Y 5Y	0.9169	0.1028	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	4.mean
Global Tilt	26.29	17.73	44.43	13.30	23.12	14.64	38.32	13.42	11.31
6W. Global Tilt	18.64	12.13	26.10	11.87	18.67	11.33	24.07	10.77	10.61
6M. Global Tilt	20.43	13.71	28.11	12.52	20.61	12.56	27.11	13.29	11.47
1Y. Global Tilt	20.75	13.96	30.03	11.95	19.34	13.62	28.51	11.62	11.81
2Y. Global Tilt	20.89	13.98	30.70	10.90	20.37	11.51	29.75	12.90	10.58
5Y. Global Tilt	24.89	14.93	32.78	15.67	25.25	13.47	33.16	12.33	14.17
	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3	p.val_2.4			
Global Tilt	9.61	0.0000	0.0129		0	0.0000		0	
6W. Global Tilt	9.09	0.0003	0.3645		0	0.0040		0	
6M. Global Tilt	10.73	0.0006	0.6953		0	0.0041		0	
1Y. Global Tilt	10.48	0.0000	0.5258		0	0.0000		0	
2Y. Global Tilt	11.00	0.0000	0.6964		0	0.0000		0	
5Y. Global Tilt	11.80	0.0592	0.9258		0	0.0087		0	
	p.val_3.4	p.val_all							
Global Tilt	0	0							
6W. Global Tilt	0	0							
6M. Global Tilt	0	0							
1Y. Global Tilt	0	0							
2Y. Global Tilt	0	0							
5Y. Global Tilt	0	0							

	t0	t1	1	2	3	4	All
1: Preop	2Y	0.0000	0.1177	0.0007	0.6427	0.0000	
2: Preop	5Y	0.0048	0.3272	0.0794	0.1859	0.3675	
3: Preop	6W	0.0000	0.0077	0.0000	0.6185	0.0000	
4:	6W 2Y	0.0521	0.2906	0.0165	0.9862	0.0418	
5:	6W 5Y	0.0896	0.0018	0.0019	0.1012	0.0000	
6:	2Y 5Y	0.5887	0.0240	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	4.mean
T1 Sagittal Tilt	-1.86	6.15	3.77	6.85	-4.02	3.82	2.22	6.77	-4.83
6W. T1 Sagittal Tilt	-3.59	4.01	-2.12	4.34	-3.89	3.91	-3.37	4.19	-4.20

6M. T1 Sagittal Tilt	-4.12	4.30	-3.05	4.96	-4.62	3.93	-2.52	5.26	-5.03
1Y. T1 Sagittal Tilt	-3.88	5.00	-2.85	5.43	-4.33	4.86	-2.11	5.36	-4.97
2Y. T1 Sagittal Tilt	-3.63	4.47	-1.59	5.03	-4.32	3.84	-1.39	5.60	-5.24
5Y. T1 Sagittal Tilt	-2.75	4.89	-0.09	8.09	-3.81	3.84	-0.99	4.43	-3.87
	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3	p.val_2.4			
T1 Sagittal Tilt	3.91	0.0000	0.2349	0.0000	0.0000	0.1307			
6W. T1 Sagittal Tilt	3.65	0.0199	0.1654	0.0079	0.4802	0.5797			
6M. T1 Sagittal Tilt	3.29	0.0526	0.6133	0.0142	0.0168	0.4410			
1Y. T1 Sagittal Tilt	4.33	0.1293	0.5228	0.0363	0.0166	0.3608			
2Y. T1 Sagittal Tilt	3.01	0.0022	0.8591	0.0000	0.0026	0.0835			
5Y. T1 Sagittal Tilt	3.36	0.0541	0.6477	0.0519	0.0058	0.9370			
	p.val_3.4	p.val_all							
T1 Sagittal Tilt	0.0000	0.0000							
6W. T1 Sagittal Tilt	0.2714	0.0329							
6M. T1 Sagittal Tilt	0.0043	0.0018							
1Y. T1 Sagittal Tilt	0.0030	0.0072							
2Y. T1 Sagittal Tilt	0.0001	0.0000							
5Y. T1 Sagittal Tilt	0.0059	0.0017							

	t0 t1	1	2	3	4	All
1: Preop 2Y	0.0000	0.5627	0.0042	0.4455	0.0001	
2: Preop 5Y	0.0623	0.7404	0.0106	0.1630	0.0932	
3: Preop 6W	0.0000	0.8032	0.0000	0.2863	0.0000	
4: 6W 2Y	0.5973	0.4309	0.0631	0.0584	0.9135	
5: 6W 5Y	0.2908	0.9071	0.0269	0.6327	0.0780	
6: 2Y 5Y	0.4418	0.4278	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	9.05	19.69	11.51	20.98	12.01	19.20
6W. Thoracolumbar L2-T10	4.91	12.50	8.71	11.61	5.00	13.08	7.37	10.07
6M. Thoracolumbar L2-T10	5.08	12.15	8.50	10.37	5.98	11.53	6.98	9.83
1Y. Thoracolumbar L2-T10	5.27	12.67	9.18	10.64	6.88	12.43	7.36	11.02
2Y. Thoracolumbar L2-T10	6.07	12.79	7.80	13.78	7.66	12.40	8.45	11.79
5Y. Thoracolumbar L2-T10	7.26	14.64	11.75	16.10	7.98	13.44	10.45	12.40
	4.mean	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3		
Thoracolumbar L2-T10	7.38	21.02	0.4355	0.4036	0.6162	0.8682		
6W. Thoracolumbar L2-T10	1.17	12.67	0.0707	0.5323	0.0005	0.2041		
6M. Thoracolumbar L2-T10	0.58	14.05	0.1650	0.4521	0.0003	0.5679		
1Y. Thoracolumbar L2-T10	-0.40	13.31	0.2340	0.4034	0.0000	0.8077		
2Y. Thoracolumbar L2-T10	1.76	12.43	0.9529	0.8041	0.0158	0.7037		
5Y. Thoracolumbar L2-T10	1.49	15.74	0.3453	0.7610	0.0225	0.4027		
	p.val_2.4	p.val_3.4	p.val_all					
Thoracolumbar L2-T10	0.1401	0.1531	0.3825					
6W. Thoracolumbar L2-T10	0.0364	0.0017	0.0019					
6M. Thoracolumbar L2-T10	0.0046	0.0025	0.0005					
1Y. Thoracolumbar L2-T10	0.0001	0.0004	0.0000					
2Y. Thoracolumbar L2-T10	0.0020	0.0022	0.0035					
5Y. Thoracolumbar L2-T10	0.0383	0.0114	0.0217					

	t0 t1	1	2	3	4	All
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1: Preop 2Y 0.7037 0.0848 0.2274 0.0271 0.0032
2: Preop 5Y 0.5379 0.1660 0.6460 0.0766 0.0907
3: Preop 6W 0.9129 0.0033 0.1018 0.0141 0.0001
4:   6W 2Y 0.7261 0.1349 0.6175 0.7588 0.2713
5:   6W 5Y 0.4395 0.1682 0.2645 0.9114 0.0955
6:   2Y 5Y 0.3375 0.8827 0.4860 0.9249 0.4062

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[1] "RSA"

	All.mean	All.sd	1.mean	1.sd	2.mean	2.sd	3.mean	3.sd	4.mean	4.sd
RSA	15.26	15.41	30.54	11.95	12.66	12.71	26.40	11.11	1.87	8.01
6W. RSA	7.59	9.53	12.84	8.94	7.76	8.81	12.02	8.99	1.38	7.47
6M. RSA	9.46	10.88	15.12	10.17	9.71	9.42	15.62	10.56	1.94	8.62
1Y. RSA	9.81	11.07	17.91	9.07	8.54	10.32	16.16	9.23	2.34	8.57
2Y. RSA	10.09	11.67	18.11	9.00	9.65	8.85	17.87	11.23	1.34	9.48
5Y. RSA	13.54	12.84	21.09	12.42	14.28	11.57	20.03	10.37	3.70	10.41

	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3	p.val_2.4	p.val_3.4	p.val_all
RSA	0.0000	0.0500	0	0.0000	0	0	0
6W. RSA	0.0010	0.6417	0	0.0055	0	0	0
6M. RSA	0.0018	0.8098	0	0.0010	0	0	0
1Y. RSA	0.0000	0.3476	0	0.0000	0	0	0
2Y. RSA	0.0000	0.9084	0	0.0000	0	0	0
5Y. RSA	0.0353	0.7528	0	0.0237	0	0	0

	t0	t1	1	2	3	4	All
1: Preop 2Y	0.0000	0.0374	0.0001	0.6917	0.0000		0.0000
2: Preop 5Y	0.0047	0.3840	0.0108	0.3290	0.2017		
3: Preop 6W	0.0000	0.0005	0.0000	0.6733	0.0000		0.0000
4: 6W 2Y	0.0054	0.1312	0.0042	0.9771	0.0058		
5: 6W 5Y	0.0099	0.0003	0.0012	0.2162	0.0000		0.0000
6: 2Y 5Y	0.3330	0.0101	0.3920	0.2344	0.0072		

[1] "RPV"

	All.mean	All.sd	1.mean	1.sd	2.mean	2.sd	3.mean	3.sd	4.mean	4.sd
RPV	-8.42	9.15	-14.74	6.97	-7.96	8.96	-13.87	6.63	-1.67	6.86
6W. RPV	-5.03	7.61	-8.22	7.53	-5.20	6.84	-8.20	8.06	-0.94	6.56
6M. RPV	-6.49	7.91	-10.14	6.96	-6.99	7.31	-10.99	7.54	-1.09	6.24
1Y. RPV	-6.39	7.94	-11.03	6.15	-6.36	7.79	-10.10	6.42	-1.35	7.02
2Y. RPV	-6.14	7.76	-10.37	6.82	-6.38	6.87	-10.10	7.03	-1.07	6.79
5Y. RPV	-8.42	8.24	-11.95	6.44	-9.77	7.40	-12.01	7.16	-1.89	7.49

	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3	p.val_2.4	p.val_3.4	p.val_all
RPV	0.0000	0.4698	0	0.0000	0	0	0
6W. RPV	0.0092	0.9893	0	0.0181	0	0	0
6M. RPV	0.0059	0.5370	0	0.0015	0	0	0
1Y. RPV	0.0000	0.4460	0	0.0011	0	0	0
2Y. RPV	0.0014	0.8446	0	0.0020	0	0	0
5Y. RPV	0.2078	0.9771	0	0.1833	0	0	0

	t0	t1	1	2	3	4	All
1: Preop 2Y	0.0000	0.0374	0.0001	0.6917	0.0000		0.0000
2: Preop 5Y	0.0047	0.3840	0.0108	0.3290	0.2017		
3: Preop 6W	0.0000	0.0005	0.0000	0.6733	0.0000		0.0000
4: 6W 2Y	0.0054	0.1312	0.0042	0.9771	0.0058		
5: 6W 5Y	0.0099	0.0003	0.0012	0.2162	0.0000		0.0000
6: 2Y 5Y	0.3330	0.0101	0.3920	0.2344	0.0072		

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1: Preop 2Y 0.0013 0.1251 0.0037 0.5505 0.0006
2: Preop 5Y 0.1003 0.1420 0.2486 0.8743 0.9929
3: Preop 6W 0.0000 0.0047 0.0001 0.4539 0.0000
4: 6W 2Y 0.1260 0.1914 0.1961 0.9021 0.0718
5: 6W 5Y 0.0350 0.0001 0.0328 0.4970 0.0000
6: 2Y 5Y 0.3632 0.0049 0.2538 0.5624 0.0059

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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	33.95	14.05	43.16	13.09	61.84	11.20
6M. ODI - Score (%)	28.30	17.97	23.15	13.54	30.65	16.54	45.19	18.30
1Y. ODI - Score (%)	25.72	18.07	23.92	15.29	27.71	16.69	44.66	15.57
2Y. ODI - Score (%)	27.53	21.27	25.20	21.02	29.41	18.47	50.35	19.33
5Y. ODI - Score (%)	28.33	21.38	26.84	20.73	30.48	19.72	49.02	19.14

	4.mean	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3
ODI - Score (%)	16.10	11.27	0.0000	0	0.0000	0
6M. ODI - Score (%)	17.78	13.04	0.0012	0	0.0166	0
1Y. ODI - Score (%)	12.83	10.94	0.1231	0	0.0000	0
2Y. ODI - Score (%)	12.76	11.29	0.1861	0	0.0001	0
5Y. ODI - Score (%)	12.18	10.78	0.3215	0	0.0001	0

	p.val_2.4	p.val_3.4	p.val_all
ODI - Score (%)	0	0	0
6M. ODI - Score (%)	0	0	0
1Y. ODI - Score (%)	0	0	0
2Y. ODI - Score (%)	0	0	0
5Y. ODI - Score (%)	0	0	0

	t0	t1	1	2	3	4	All
1: Preop 2Y	0.0081	0.0000	0.0002	0.0418	0.0000		
2: Preop 5Y	0.0497	0.0000	0.0003	0.0307	0.0000		
3: Preop 6M	0.0000	0.0000	0.0000	0.3518	0.0000		
4: 6M 2Y	0.5253	0.5710	0.1463	0.0058	0.6108		
5: 6M 5Y	0.3003	0.9433	0.3259	0.0047	0.9874		
6: 2Y 5Y	0.6901	0.6724	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	3.14	0.57	2.84	0.51	2.11
6M. SRS22 - Function / Activity	3.26	0.82	3.34	0.57	3.12	0.69	2.59
1Y. SRS22 - Function / Activity	3.40	0.89	3.39	0.63	3.26	0.77	2.59
2Y. SRS22 - Function / Activity	3.48	0.93	3.53	0.76	3.23	0.73	2.63
5Y. SRS22 - Function / Activity	3.50	0.91	3.49	0.77	3.43	0.76	2.67

	3.sd	4.mean	4.sd	p.val_1.2	p.val_1.3	p.val_1.4
SRS22 - Function / Activity	0.52	4.01	0.70	0.0006	0	0

6M. SRS22 - Function / Activity	0.73	3.81	0.79	0.0224	0	0
1Y. SRS22 - Function / Activity	0.77	4.10	0.73	0.2225	0	0
2Y. SRS22 - Function / Activity	0.85	4.27	0.66	0.0126	0	0
5Y. SRS22 - Function / Activity	0.88	4.16	0.78	0.7049	0	0

	p.val_2.3	p.val_2.4	p.val_3.4	p.val_all
SRS22 - Function / Activity	0	0	0	0
6M. SRS22 - Function / Activity	0	0	0	0
1Y. SRS22 - Function / Activity	0	0	0	0
2Y. SRS22 - Function / Activity	0	0	0	0
5Y. SRS22 - Function / Activity	0	0	0	0

	t0	t1	1	2	3	4	All
1: Preop 2Y	0.0016	0.0000	0.0001	0.0099	0.0000		
2: Preop 5Y	0.0122	0.0000	0.0005	0.2157	0.0000		
3: Preop 6M	0.0561	0.0004	0.0001	0.0640	0.0082		
4: 6M 2Y	0.1176	0.1885	0.8295	0.0000	0.0013		
5: 6M 5Y	0.2786	0.0012	0.6438	0.0067	0.0009		
6: 2Y 5Y	0.7699	0.0435	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	4.mean
SRS22 - Pain	2.62	0.97	2.87	0.68	2.30	0.63	1.52	0.47	3.60
6M. SRS22 - Pain	3.42	0.90	3.79	0.69	3.30	0.85	2.79	0.90	3.75
1Y. SRS22 - Pain	3.57	0.98	3.85	0.77	3.43	0.95	2.68	0.99	4.08
2Y. SRS22 - Pain	3.49	1.09	3.85	0.91	3.32	1.04	2.51	1.08	4.07
5Y. SRS22 - Pain	3.38	1.13	3.65	1.02	3.22	1.06	2.50	1.09	4.02

	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3	p.val_2.4
SRS22 - Pain	0.78	0.0000	0	0.0000	0e+00	0e+00
6M. SRS22 - Pain	0.84	0.0000	0	0.7042	4e-04	1e-04
1Y. SRS22 - Pain	0.69	0.0015	0	0.0535	0e+00	0e+00
2Y. SRS22 - Pain	0.77	0.0005	0	0.1204	0e+00	0e+00
5Y. SRS22 - Pain	0.89	0.0217	0	0.0577	6e-04	0e+00

	p.val_3.4	p.val_all
SRS22 - Pain	0	0
6M. SRS22 - Pain	0	0
1Y. SRS22 - Pain	0	0
2Y. SRS22 - Pain	0	0
5Y. SRS22 - Pain	0	0

	t0	t1	1	2	3	4	All
1: Preop 2Y	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
2: Preop 5Y	0.0000	0.0000	0.0000	0.0032	0.0000		
3: Preop 6M	0.0000	0.0000	0.0000	0.2089	0.0000		
4: 6M 2Y	0.7036	0.8325	0.1421	0.0062	0.3696		
5: 6M 5Y	0.4184	0.5528	0.1692	0.0619	0.6041		
6: 2Y 5Y	0.3013	0.4641	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	2.47	0.64	2.43	0.69
6M. SRS22 - Self image / Appearance	3.48	0.83	3.72	0.64	3.36	0.81
1Y. SRS22 - Self image / Appearance	3.52	0.80	3.62	0.64	3.49	0.73
2Y. SRS22 - Self image / Appearance	3.43	0.93	3.57	0.81	3.34	0.83
5Y. SRS22 - Self image / Appearance	3.37	0.93	3.48	0.78	3.30	0.91

	3.mean	3.sd	4.mean	4.sd	p.val_1.2	p.val_1.3
SRS22 - Self image / Appearance	1.65	0.50	2.84	0.70	0.7397	0
6M. SRS22 - Self image / Appearance	2.93	0.92	3.82	0.71	0.0010	0
1Y. SRS22 - Self image / Appearance	2.82	0.87	3.91	0.67	0.2142	0
2Y. SRS22 - Self image / Appearance	2.60	0.93	3.95	0.76	0.0735	0
5Y. SRS22 - Self image / Appearance	2.60	0.87	3.90	0.74	0.2121	0

	p.val_1.4	p.val_2.3	p.val_2.4	p.val_3.4
SRS22 - Self image / Appearance	0.0007	0.0000	0	0
6M. SRS22 - Self image / Appearance	0.3822	0.0029	0	0
1Y. SRS22 - Self image / Appearance	0.0067	0.0000	0	0
2Y. SRS22 - Self image / Appearance	0.0044	0.0000	0	0
5Y. SRS22 - Self image / Appearance	0.0064	0.0001	0	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	4	All
1: Preop 2Y	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2: Preop 5Y	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3: Preop 6M	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4: 6M 2Y	0.2486	0.8800	0.0573	0.2392	0.4681		
5: 6M 5Y	0.0942	0.6216	0.0722	0.5067	0.1429		
6: 2Y 5Y	0.5764	0.7228	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	3.82	0.66	3.03	0.73	2.26	0.65
6M. SRS22 - Mental health	3.55	0.85	4.07	0.65	3.40	0.87	2.95	0.88
1Y. SRS22 - Mental health	3.61	0.83	4.04	0.66	3.50	0.78	2.93	0.96
2Y. SRS22 - Mental health	3.51	0.94	3.99	0.76	3.42	0.96	2.68	0.97
5Y. SRS22 - Mental health	3.55	0.89	4.01	0.75	3.49	0.81	2.66	0.85

	4.mean	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3
SRS22 - Mental health	3.53	0.71	0e+00	0	0.0096	0.0000
6M. SRS22 - Mental health	3.79	0.61	0e+00	0	0.0089	0.0016
1Y. SRS22 - Mental health	3.87	0.61	0e+00	0	0.1024	0.0002
2Y. SRS22 - Mental health	3.81	0.62	0e+00	0	0.1311	0.0000
5Y. SRS22 - Mental health	3.91	0.67	2e-04	0	0.4481	0.0000

	p.val_2.4	p.val_3.4	p.val_all
SRS22 - Mental health	0e+00	0	0
6M. SRS22 - Mental health	1e-04	0	0
1Y. SRS22 - Mental health	1e-04	0	0
2Y. SRS22 - Mental health	2e-04	0	0

5Y. SRS22 - Mental health 4e-04 0 0

	t0	t1	1	2	3	4	All
1: Preop	2Y	0.1725	0.0003	0.0071	0.0032	0.0000	0.0000
2: Preop	5Y	0.1562	0.0000	0.0149	0.0008	0.0000	0.0000
3: Preop	6M	0.0333	0.0002	0.0000	0.0063	0.0000	0.0000
4:	6M 2Y	0.5474	0.8777	0.1214	0.7953	0.5454	
5:	6M 5Y	0.6989	0.4411	0.0969	0.2696	0.9850	
6:	2Y 5Y	0.8752	0.5603	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	3.08	0.42	2.66	0.42	1.90
6M. SRS22 - SRS Subtotal score	3.43	0.69	3.74	0.47	3.29	0.63	2.82
1Y. SRS22 - SRS Subtotal score	3.53	0.74	3.73	0.54	3.42	0.64	2.76
2Y. SRS22 - SRS Subtotal score	3.48	0.85	3.73	0.68	3.33	0.75	2.61
5Y. SRS22 - SRS Subtotal score	3.44	0.87	3.58	0.87	3.36	0.74	2.61

	3.sd	4.mean	4.sd	p.val_1.2	p.val_1.3	p.val_1.4
SRS22 - SRS Subtotal score	0.36	3.49	0.56	0.0000	0	0.0000
6M. SRS22 - SRS Subtotal score	0.69	3.79	0.58	0.0000	0	0.5035
1Y. SRS22 - SRS Subtotal score	0.76	3.99	0.53	0.0007	0	0.0035
2Y. SRS22 - SRS Subtotal score	0.81	4.02	0.56	0.0004	0	0.0062
5Y. SRS22 - SRS Subtotal score	0.79	4.00	0.67	0.1406	0	0.0087

	p.val_2.3	p.val_2.4	p.val_3.4	p.val_all
SRS22 - SRS Subtotal score	0	0	0	0
6M. SRS22 - SRS Subtotal score	0	0	0	0
1Y. SRS22 - SRS Subtotal score	0	0	0	0
2Y. SRS22 - SRS Subtotal score	0	0	0	0
5Y. SRS22 - SRS Subtotal score	0	0	0	0

	t0	t1	1	2	3	4	All
1: Preop	2Y	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2: Preop	5Y	0.0007	0.0000	0.0000	0.0000	0.0000	0.0000
3: Preop	6M	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
4:	6M 2Y	0.9725	0.6634	0.1317	0.0057	0.4272	
5:	6M 5Y	0.2824	0.4468	0.1710	0.0526	0.8979	
6:	2Y 5Y	0.3354	0.7484	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	4.mean
SF36 - PCS	36.45	9.47	35.27	7.86	33.56	7.02	29.12	6.40	46.26
6M. SF36 - PCS	40.54	9.17	40.20	8.27	39.63	8.53	34.18	7.72	46.19
1Y. SF36 - PCS	41.94	10.01	41.23	8.84	41.19	9.20	33.24	8.43	48.71
2Y. SF36 - PCS	42.06	10.41	42.27	8.73	40.71	9.42	33.37	9.69	49.09
5Y. SF36 - PCS	41.64	11.22	40.94	10.60	40.29	10.39	33.58	9.64	49.54

	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3	p.val_2.4	p.val_3.4
SF36 - PCS	7.68	0.1384	0.0000	0	0e+00	0	0
6M. SF36 - PCS	8.36	0.6639	0.0001	0	0e+00	0	0

1Y. SF36 - PCS	7.93	0.9751	0.0000	0	0e+00	0	0
2Y. SF36 - PCS	8.30	0.2716	0.0000	0	0e+00	0	0
5Y. SF36 - PCS	9.19	0.7324	0.0013	0	5e-04	0	0

	p.val_all
SF36 - PCS	0
6M. SF36 - PCS	0
1Y. SF36 - PCS	0
2Y. SF36 - PCS	0
5Y. SF36 - PCS	0

	t0	t1	1	2	3	4	All
1: Preop	2Y	0.0000	0.0000	0.0068	0.0172	0.0000	
2: Preop	5Y	0.0032	0.0000	0.0139	0.0230	0.0000	
3: Preop	6M	0.0009	0.0000	0.0002	0.9534	0.0000	
4:	6M 2Y	0.1876	0.3383	0.6246	0.0202	0.0460	
5:	6M 5Y	0.6999	0.6053	0.7485	0.0248	0.2103	
6:	2Y 5Y	0.4966	0.7514	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	4.mean
SF36 - MCS	42.99	11.84	49.86	10.56	42.58	11.52	33.08	10.00	44.99
6M. SF36 - MCS	47.14	11.82	53.62	9.12	45.46	12.86	41.17	11.84	49.01
1Y. SF36 - MCS	47.55	11.57	53.25	9.25	46.46	11.63	40.03	13.37	49.67
2Y. SF36 - MCS	46.96	12.12	51.53	9.99	45.85	12.82	38.38	13.01	50.88
5Y. SF36 - MCS	47.66	11.33	52.01	9.42	47.30	11.21	38.90	12.41	50.64
	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	p.val_2.3	p.val_2.4			
SF36 - MCS	10.04	0.0000		0	0.0046	0.0000	0.0950		
6M. SF36 - MCS	9.28	0.0000		0	0.0033	0.0291	0.0201		
1Y. SF36 - MCS	8.86	0.0000		0	0.0174	0.0025	0.0223		
2Y. SF36 - MCS	8.17	0.0012		0	0.6762	0.0005	0.0005		
5Y. SF36 - MCS	8.89	0.0099		0	0.4497	0.0005	0.0375		
	p.val_3.4	p.val_all							
SF36 - MCS	0e+00	0							
6M. SF36 - MCS	1e-04	0							
1Y. SF36 - MCS	0e+00	0							
2Y. SF36 - MCS	0e+00	0							
5Y. SF36 - MCS	0e+00	0							

	t0	t1	1	2	3	4	All
1: Preop	2Y	0.3701	0.0300	0.0163	0.0000	0.0000	
2: Preop	5Y	0.2686	0.0016	0.0172	0.0004	0.0000	
3: Preop	6M	0.0360	0.0571	0.0001	0.0060	0.0000	
4:	6M 2Y	0.2374	0.8101	0.2338	0.1533	0.8411	
5:	6M 5Y	0.3829	0.2482	0.3728	0.2823	0.5974	
6:	2Y 5Y	0.8038	0.3588	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	1756.49	1681.13

Total surgical time st1+st2+st3	308.97	165.59	309.27	157.28	
Number of Posterior Instrumented Levels	9.06	4.58	8.53	4.66	
Number of Interbody Fusions	0.80	1.16	1.12	1.21	
	2.mean	2.sd	3.mean	3.sd	4.mean
Total Operative Blood Loss st1+st2+st3	1268.06	1090.18	1875.30	1275.17	1152.39
Total surgical time st1+st2+st3	272.04	147.89	336.46	169.16	341.14
Number of Posterior Instrumented Levels	8.28	4.70	9.26	4.48	10.24
Number of Interbody Fusions	1.01	1.17	0.98	1.08	0.18
	4.sd	p.val_1.2	p.val_1.3	p.val_1.4	
Total Operative Blood Loss st1+st2+st3	966.75	0.0382	0.6577	0.0134	
Total surgical time st1+st2+st3	182.32	0.1095	0.3469	0.2283	
Number of Posterior Instrumented Levels	4.23	0.7292	0.3775	0.0198	
Number of Interbody Fusions	0.94	0.5512	0.4988	0.0000	
	p.val_2.3	p.val_2.4	p.val_3.4	p.val_all	
Total Operative Blood Loss st1+st2+st3	0.0017	0.4327	0.0004	0.0005	
Total surgical time st1+st2+st3	0.0106	0.0018	0.8665	0.0054	
Number of Posterior Instrumented Levels	0.1681	0.0010	0.1690	0.0088	
Number of Interbody Fusions	0.8580	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
5 20 41

```

```

$'Pelvic fixation'$'1'$proportion
variable
NA No Yes
0.07575758 0.30303030 0.62121212

```

```

$'Pelvic fixation'$'2'
$'Pelvic fixation'$'2'$table
variable
NA No Yes
8 82 49

```

```

$'Pelvic fixation'$'2'$proportion
variable
NA No Yes
0.05755396 0.58992806 0.35251799

```

```

$'Pelvic fixation'$'3'
$'Pelvic fixation'$'3'$table
variable
NA   No Yes
  3   22 38

```

```

$'Pelvic fixation'$'3'$proportion
variable
      NA      No      Yes
0.04761905 0.34920635 0.60317460

```

```

$'Pelvic fixation'$'4'
$'Pelvic fixation'$'4'$table
variable
NA   No Yes
  8   90  6

```

```

$'Pelvic fixation'$'4'$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
      Posterior Posterior-Anterior Posterior-Posterior
      61          4              1

```

\$Surgical Approach'\$1'\$proportion
variable

Posterior	Posterior-Anterior	Posterior-Posterior
0.92424242	0.06060606	0.01515152

\$Surgical Approach'\$2'
\$Surgical Approach'\$2'\$table
variable

Anterior	Anterior-Posterior	Posterior	Posterior-Posterior
1	2	135	1

\$Surgical Approach'\$2'\$proportion
variable

Anterior	Anterior-Posterior	Posterior	Posterior-Posterior
0.007194245	0.014388489	0.971223022	0.007194245

\$Surgical Approach'\$3'
\$Surgical Approach'\$3'\$table
variable

Posterior	Posterior-Anterior
56	7

\$Surgical Approach'\$3'\$proportion
variable

Posterior	Posterior-Anterior
0.8888889	0.1111111

\$Surgical Approach'\$4'
\$Surgical Approach'\$4'\$table
variable

Anterior-Posterior	Posterior
2	100
Posterior-Posterior	Posterior-Posterior-Anterior
1	1

\$Surgical Approach'\$4'\$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
37 29

\$Decompression\$'1'\$proportion
variable
No Yes
0.5606061 0.4393939

\$Decompression\$'2'
\$Decompression\$'2'\$table
variable
No Yes
98 41

\$Decompression\$'2'\$proportion
variable
No Yes
0.705036 0.294964

\$Decompression\$'3'
\$Decompression\$'3'\$table
variable
No Yes
41 22

\$Decompression\$'3'\$proportion
variable
No Yes
0.6507937 0.3492063

\$Decompression\$'4'
\$Decompression\$'4'\$table
variable
No Yes
98 6

\$Decompression\$'4'\$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
28 38

```

```

$'Interbody Fusion'$'1'$proportion
variable
  No      Yes
0.4242424 0.5757576

```

```

$'Interbody Fusion'$'2'
$'Interbody Fusion'$'2'$table
variable
  No Yes
62 77

```

```

$'Interbody Fusion'$'2'$proportion
variable
  No      Yes
0.4460432 0.5539568

```

```

$'Interbody Fusion'$'3'
$'Interbody Fusion'$'3'$table
variable
  No Yes
28 35

```

```

$'Interbody Fusion'$'3'$proportion
variable
  No      Yes
0.4444444 0.5555556

```

```

$'Interbody Fusion'$'4'
$'Interbody Fusion'$'4'$table
variable
  No Yes

```

98 6

\$'Interbody Fusion'\$'4'\$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
25	41

\$Osteotomy\$'1'\$proportion
variable

No	Yes
0.3787879	0.6212121

\$Osteotomy\$'2'
\$Osteotomy\$'2'\$table
variable

No	Yes
82	57

\$Osteotomy\$'2'\$proportion
variable

No	Yes
0.5899281	0.4100719

\$Osteotomy\$'3'
\$Osteotomy\$'3'\$table
variable

No	Yes
24	39

\$Osteotomy\$'3'\$proportion
variable

No	Yes
0.3809524	0.6190476

\$Osteotomy\$'4'
 \$Osteotomy\$'4'\$table
 variable
 No Yes
 70 34

\$Osteotomy\$'4'\$proportion
 variable
 No Yes
 0.6730769 0.3269231

\$'3C0'
 \$'3C0'\$All
 \$'3C0'\$All\$table
 variable
 No Yes
 318 54

\$'3C0'\$All\$proportion
 variable
 No Yes
 0.8548387 0.1451613

\$'3C0'\$'1'
 \$'3C0'\$'1'\$table
 variable
 No Yes
 49 17

\$'3C0'\$'1'\$proportion
 variable
 No Yes
 0.7424242 0.2575758

\$'3C0'\$'2'
 \$'3C0'\$'2'\$table
 variable
 No Yes
 125 14

\$'3C0'\$'2'\$proportion
 variable
 No Yes
 0.8992806 0.1007194

```

$'3C0'$'3'
$'3C0'$'3'$table
variable
  No Yes
  45 18

$'3C0'$'3'$proportion
variable
  No      Yes
0.7142857 0.2857143

```

```

$'3C0'$'4'
$'3C0'$'4'$table
variable
  No Yes
  99  5

$'3C0'$'4'$proportion
variable
  No      Yes
0.95192308 0.04807692

```

Reinterventions

```

      group reiqs patients total
1:      1      48         22     66
2:      2      76         41    139
3:      3      71         29     63
4:      4      19         13    104
5:    all     214        105    372

      p_val_all_1 p_val_all_2 p_val_all_3 p_val_all_4 p_val_1_2 p_val_1_3
1:      0.4867      0.8627      0.0073      0.0016      0.6933      0.1955
      p_val_1_4 p_val_2_3 p_val_2_4 p_val_3_4
1:      0.0021      0.0333      0.0027      0

```

Impacts

```

      Complication Impact all_num all_patients 1_num 1_patients 2_num 2_patients
1:              0         1         1         0         0         0
2:      Adverse Event         6         5         0         0         2
3: Major Complication      251        113        59        24        94
4: Minor Complication      271        175        71        43       102
      3_num 3_patients 4_num 4_patients all  1  2  3  4 p_val_all_1 p_val_all_2
1:      1         1         0         0 372 66 139 63 104      1.0000      1.0000
2:      0         0         4         3 372 66 139 63 104      0.7500      1.0000
3:      77        31        21        15 372 66 139 63 104      0.4106      0.9887
4:      63        41        35        28 372 66 139 63 104      0.0099      0.8049
      p_val_all_3 p_val_all_4 p_val_1_2 p_val_1_3 p_val_1_4 p_val_2_3 p_val_2_4
1:      0.6719      1.0000      NaN      0.9814      NaN      0.6839      NaN

```


2:	0.7745	0.5164	0.8268	NaN	0.4269	0.8494	0.7423
3:	0.0052	0.0018	0.5387	0.1949	0.0018	0.0193	0.0046
4:	0.0120	0.0004	0.0123	1.0000	0.0000	0.0143	0.0051

p_val_3_4

1:	0.7995
2:	0.4476
3:	0.0000
4:	0.0000

Categories

	Category of the complication	all_num	all_patients	1_num	1_patients
1:	Central neurologic complications	1	1	0	0
2:	Iatrogenic	74	65	21	19
3:	Infectious complications	36	30	4	4
4:	Mechanical complications	224	135	46	30
5:	Other complications	124	80	37	20
6:	Pain	19	18	4	4
7:	Peripheral neurologic complications	51	43	18	15

	2_num	2_patients	3_num	3_patients	4_num	4_patients	all	1	2	3	4
1:	1	1	0	0	0	0	372	66	139	63	104
2:	23	19	17	14	13	13	372	66	139	63	104
3:	13	11	13	10	6	5	372	66	139	63	104
4:	84	49	76	41	18	15	372	66	139	63	104
5:	46	27	22	18	19	15	372	66	139	63	104
6:	11	10	2	2	2	2	372	66	139	63	104
7:	20	16	11	10	2	2	372	66	139	63	104

	p_val_all_1	p_val_all_2	p_val_all_3	p_val_all_4	p_val_1_2	p_val_1_3
1:	1.0000	1.0000	1.0000	1.0000	1.0000	NaN
2:	0.0475	0.3690	0.4669	0.2885	0.0159	0.5141
3:	0.7557	1.0000	0.0805	0.3615	0.8501	0.1316
4:	0.2012	0.9092	0.0000	0.0000	0.2117	0.0391
5:	0.1585	0.6948	0.2808	0.1446	0.1203	0.9821
6:	0.9100	0.4106	0.7964	0.3013	0.9965	0.7190
7:	0.0232	1.0000	0.4474	0.0054	0.0593	0.4462

	p_val_1_4	p_val_2_3	p_val_2_4	p_val_3_4
1:	NaN	1.0000	1.0000	NaN
2:	0.0144	0.1875	0.9403	0.1506
3:	0.9967	0.1420	0.4811	0.0320
4:	0.0000	0.0001	0.0005	0.0000
5:	0.0214	0.2059	0.3960	0.0429
6:	0.3181	0.4247	0.1147	1.0000
7:	0.0000	0.5281	0.0100	0.0021