Loss of alignment

With Posterior Instrumented Fusion: 348

Posterior Instrumental Fusion is Iliac: 134

Differences smaller than 10º in 6W-2Y Lordosis (top of L1-S1): 112

Without complications (PJK, PJF, DJK, DJF) ever after surgery: 81

Increment = Future - Baseline

Estability Increment Quality of Life

```
### ODI - Score (%)
Base Time point 6M. ODI - Score (%)

Time evolution
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)  -0.6846     0.8219 257.8661 -0.8330   0.4056
time_point    0.9196     0.6968  77.7859  1.3198   0.1908


### SRS22 - SRS Subtotal score
Base Time point 6M. SRS22 - SRS Subtotal score

Time evolution
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)   0.0499     0.0304 285.8616  1.6436   0.1014
time_point   -0.0424     0.0264  92.7220 -1.6034   0.1122


### SF36 - PCS
Base Time point 6M. SF36 - PCS

Time evolution
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)   0.7372     0.4268 266.0851  1.7273   0.0853
time_point   -0.0769     0.3061  90.6984 -0.2513   0.8021


### SF36 - MCS
Base Time point 6M. SF36 - MCS

Time evolution
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)  -0.1337     0.6340 268.3229 -0.2109   0.8332
time_point   -0.8294     0.4345  96.3686 -1.9091   0.0592
```

Estability Increment Radiology

Static Major curve Cobb angle
Base Time point 6W. Static Major curve Cobb angle

Time evolution

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	-1.3420	0.4006	302.2941	-3.3499	0.0009
time_point	0.2834	0.2873	92.7948	0.9865	0.3265

Preop & Inc preop variable: Static Major curve Cobb angle
Basic Demographics

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	2.4932	2.1325	352.3935	1.1691	0.2431
Age	-0.0612	0.0348	350.2049	-1.7581	0.0796
SiteBOR Op	-0.5105	0.8290	347.6434	-0.6158	0.5384
SiteIST Op	2.4975	1.8526	336.9211	1.3481	0.1785
SiteMAD Op	1.6440	1.3466	343.9461	1.2209	0.2230
time_point	0.2847	0.2785	93.7333	1.0223	0.3093

Factors

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	-3.1573	3.7597	340.2287	-0.8398	0.4016
Age	-0.0524	0.0392	341.7552	-1.3370	0.1821
SiteBOR Op	1.9447	1.1386	335.5515	1.7080	0.0886
SiteIST Op	2.9833	1.9359	326.2142	1.5410	0.1243
SiteMAD Op	2.7637	1.4429	333.2032	1.9153	0.0563
‘Prior Spine Surgery‘Yes	2.1499	0.9173	341.6880	2.3438	0.0197
‘Osteoporosis / osteopenia‘Yes	0.1142	0.8812	341.5386	0.1296	0.8970
essg_categoryidiopathic	-1.9300	0.9716	339.1185	-1.9865	0.0478
essg_categoryothers	-0.2528	1.3577	341.9523	-0.1862	0.8524
Non_instrumented_segments	0.0997	0.1181	335.9786	0.8440	0.3993
inc_preop	-0.0982	0.0396	339.3879	-2.4811	0.0136
preop	0.0179	0.0273	342.5408	0.6563	0.5121
time_point	0.3008	0.2723	86.4832	1.1045	0.2724

Coronal Balance (C7PL to CSVL)
Base Time point 6W. Coronal Balance (C7PL to CSVL)

Time evolution

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	-0.4711	0.7789	302.3214	-0.6048	0.5458
time_point	0.7276	0.6898	90.5354	1.0548	0.2943

Preop & Inc preop variable: Coronal Balance (C7PL to CSVL)
Basic Demographics

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	4.6015	4.3986	353.2134	1.0461	0.2962
Age	-0.0703	0.0715	353.8520	-0.9836	0.3260
SiteBOR Op	-0.5071	1.7899	355.5474	-0.2833	0.7771
SiteIST Op	-2.9695	3.3871	354.3938	-0.8767	0.3812

```
SiteMAD Op    -2.3102    2.8401 355.0000 -0.8134    0.4165
SiteZUR Op     1.8067    7.3931 302.1848  0.2444    0.8071
time_point     0.7226    0.6933  88.7843  1.0422    0.3001
```

Factors

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	3.1196	5.5903	348.9921	0.5580	0.5772
Age	0.0199	0.0733	348.5359	0.2710	0.7866
SiteBOR Op	-3.2500	1.8624	348.9631	-1.7451	0.0818
SiteIST Op	-6.4659	3.4828	348.8211	-1.8565	0.0642
SiteMAD Op	-0.9372	3.0689	348.9964	-0.3054	0.7603
SiteZUR Op	-0.6584	7.2853	300.6371	-0.0904	0.9280
'Prior Spine Surgery'Yes	-0.5444	1.5991	348.7489	-0.3404	0.7338
'Osteoporosis / osteopenia'Yes	3.8859	1.7887	348.9444	2.1724	0.0305
essg_categoryidiopathic	5.8576	1.8443	348.8158	3.1761	0.0016
essg_categoryothers	0.8305	2.4324	348.9123	0.3414	0.7330
Non_instrumented_segments	-0.1160	0.2416	349.0000	-0.4802	0.6314
inc_preop	-0.2772	0.0520	348.1497	-5.3277	0.0000
preop	-0.2214	0.0511	348.9323	-4.3359	0.0000
time_point	0.7743	0.6252	88.9903	1.2385	0.2188

Sagittal Balance
Base Time point 6W. Sagittal Balance

Time evolution

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	-2.7876	1.8997	290.9276	-1.4674	0.1434
time_point	5.5054	1.5947	88.1695	3.4523	0.0009

Preop & Inc preop variable: Sagittal Balance
Basic Demographics

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	-0.4448	10.5900	343.1462	-0.0420	0.9665
Age	0.0310	0.1717	343.6168	0.1806	0.8568
SiteBOR Op	-4.2785	4.1365	343.9763	-1.0343	0.3017
SiteIST Op	-22.2232	8.9572	343.9916	-2.4811	0.0136
SiteMAD Op	-7.4971	7.2729	343.9709	-1.0308	0.3033
SiteZUR Op	-1.6634	24.5060	275.7632	-0.0679	0.9459
time_point	5.5203	1.5914	85.1157	3.4688	0.0008

Factors

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	3.4104	12.5764	336.9265	0.2712	0.7864
Age	-0.1726	0.1736	337.0000	-0.9944	0.3207
SiteBOR Op	-5.7222	4.1273	336.5481	-1.3864	0.1665
SiteIST Op	-13.7303	8.8010	336.6707	-1.5601	0.1197
SiteMAD Op	-4.0954	7.4844	336.5429	-0.5472	0.5846
SiteZUR Op	-8.1592	23.5398	274.4982	-0.3466	0.7291
'Prior Spine Surgery'Yes	-16.7456	3.8111	336.9407	-4.3940	0.0000
'Osteoporosis / osteopenia'Yes	8.5360	4.0765	336.9999	2.0940	0.0370
essg_categoryidiopathic	2.4773	4.2075	336.9879	0.5888	0.5564
essg_categoryothers	1.7809	5.6949	336.0270	0.3127	0.7547
Non_instrumented_segments	1.1272	0.5190	336.8581	2.1717	0.0306

```
inc_preop                        -0.2733      0.0614 336.9991 -4.4491    0.0000
preop                            -0.1293      0.0597 336.9985 -2.1637    0.0312
time_point                        5.5660      1.4315  85.8561  3.8883    0.0002
```

Sagittal T2-T5
Base Time point 6W. Sagittal T2-T5

Time evolution
```
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)  -1.1092     0.4005 278.6337 -2.7695   0.0060
time_point    0.4973     0.3503  78.0005  1.4194   0.1598
```

Preop & Inc preop variable: Sagittal T2-T5
Basic Demographics
```
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)  -3.1342     2.3006 331.0000 -1.3624   0.1740
Age           0.0205     0.0370 331.5136  0.5542   0.5798
SiteBOR Op    0.8426     0.8663 331.9420  0.9727   0.3314
SiteIST Op   -1.2467     2.1149 330.2509 -0.5895   0.5559
SiteMAD Op    2.7470     1.3842 331.8255  1.9845   0.0480
SiteZUR Op    1.1476     3.6510 277.7050  0.3143   0.7535
time_point    0.5153     0.3459  78.0904  1.4899   0.1403
```

Factors
```
                              Estimate Std. Error       df t value Pr(>|t|)
(Intercept)                     6.7594     2.8282 323.7353  2.3900   0.0174
Age                            -0.0003     0.0354 323.8296 -0.0085   0.9932
SiteBOR Op                      0.4229     0.8408 322.3713  0.5030   0.6153
SiteIST Op                     -1.8180     2.0841 322.6478 -0.8723   0.3837
SiteMAD Op                      0.8941     1.3757 322.5487  0.6499   0.5162
SiteZUR Op                      3.2245     3.5816 282.6776  0.9003   0.3687
'Prior Spine Surgery'Yes        0.9619     0.8036 323.8838  1.1969   0.2322
'Osteoporosis / osteopenia'Yes -1.1575    0.8889 324.0880 -1.3023   0.1938
essg_categoryidiopathic         0.2898     0.8880 323.4681  0.3263   0.7444
essg_categoryothers            -0.9058     1.2478 322.5350 -0.7260   0.4684
Non_instrumented_segments      -0.3936     0.1141 322.8216 -3.4483   0.0006
inc_preop                      -0.4083     0.0550 323.5851 -7.4266   0.0000
preop                          -0.3537     0.0607 323.0774 -5.8292   0.0000
time_point                      0.5264     0.2902  83.0205  1.8140   0.0733
```

Sagittal T5-T12
Base Time point 6W. Sagittal T5-T12

Time evolution
```
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)   1.3235     0.4292 312.2337  3.0839   0.0022
time_point    1.3611     0.3948  90.8590  3.4477   0.0009
```

Preop & Inc preop variable: Sagittal T5-T12
Basic Demographics
```
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)  -4.6212     2.4213 368.6633 -1.9086   0.0571
```

```
Age          0.0707     0.0390 369.2568  1.8139     0.0705
SiteBOR Op   1.8580     0.9601 370.4862  1.9353     0.0537
SiteIST Op   1.1914     2.0909 369.6358  0.5698     0.5692
SiteMAD Op   3.5105     1.5772 370.0689  2.2258     0.0266
SiteZUR Op  -0.1877     5.7354 298.8866 -0.0327     0.9739
time_point   1.3825     0.3788  89.5892  3.6494     0.0004
```

Factors

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	0.2296	3.3366	363.6061	0.0688	0.9452
Age	0.0913	0.0414	362.6248	2.2035	0.0282
SiteBOR Op	0.6215	1.0620	363.5451	0.5852	0.5588
SiteIST Op	-1.0640	2.3019	363.4485	-0.4622	0.6442
SiteMAD Op	0.4965	1.8154	363.0685	0.2735	0.7846
SiteZUR Op	-1.0666	5.7212	296.9634	-0.1864	0.8522
'Prior Spine Surgery'Yes	-0.7001	0.9913	363.7432	-0.7063	0.4805
'Osteoporosis / osteopenia'Yes	-0.0907	1.0770	363.3159	-0.0842	0.9329
essg_categoryidiopathic	-0.2295	1.0440	362.5899	-0.2198	0.8261
essg_categoryothers	1.0508	1.4193	364.0000	0.7404	0.4596
Non_instrumented_segments	-0.0727	0.1469	363.6550	-0.4946	0.6211
inc_preop	-0.1357	0.0407	363.7228	-3.3380	0.0009
preop	-0.1174	0.0336	363.7528	-3.4920	0.0005
time_point	1.3862	0.3708	90.5281	3.7379	0.0003

Sagittal T2-T12
Base Time point 6W. Sagittal T2-T12

Time evolution

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	0.4954	0.4196	303.4505	1.1805	0.2387
time_point	1.1892	0.4151	81.3859	2.8651	0.0053

Preop & Inc preop variable: Sagittal T2-T12
Basic Demographics

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	-6.1124	2.4116	363.9627	-2.5345	0.0117
Age	0.0806	0.0394	364.8742	2.0454	0.0415
SiteBOR Op	2.1437	0.9303	365.9174	2.3043	0.0218
SiteIST Op	-0.6251	1.9713	367.8621	-0.3171	0.7513
SiteMAD Op	3.3055	1.5248	365.1146	2.1679	0.0308
SiteZUR Op	3.8329	4.0216	306.1581	0.9531	0.3413
time_point	1.2361	0.3914	81.6041	3.1581	0.0022

Factors

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	0.0976	3.4186	358.5243	0.0286	0.9772
Age	0.0890	0.0417	357.9568	2.1358	0.0334
SiteBOR Op	1.5092	1.0285	358.5138	1.4673	0.1432
SiteIST Op	-3.1152	2.2116	360.5621	-1.4086	0.1598
SiteMAD Op	1.1738	1.7554	357.7610	0.6687	0.5041
SiteZUR Op	4.0285	4.1113	305.4306	0.9799	0.3279
'Prior Spine Surgery'Yes	-0.1668	0.9657	359.4052	-0.1727	0.8630
'Osteoporosis / osteopenia'Yes	-0.0879	0.9914	359.3538	-0.0887	0.9294

```
essg_categoryidiopathic          -0.3785     1.0095 356.1376 -0.3749    0.7079
essg_categoryothers               1.1561     1.3443 361.3633  0.8599    0.3904
Non_instrumented_segments        -0.3207     0.1366 358.0647 -2.3469    0.0195
inc_preop                        -0.0949     0.0431 358.2378 -2.2026    0.0283
preop                            -0.0718     0.0325 357.5401 -2.2114    0.0276
time_point                        1.2560     0.3854  80.6095  3.2586    0.0016
```

Lordosis (top of L1-S1)
Base Time point 6W. Lordosis (top of L1-S1)

Time evolution
```
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)   0.1865     0.3298 337.9531  0.5655   0.5721
time_point    0.7607     0.2890 105.2433  2.6324   0.0098
```

Preop & Inc preop variable: Lordosis (top of L1-S1)
Basic Demographics
```
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)   1.8274     1.8372 390.6816  0.9946   0.3205
Age          -0.0211     0.0298 391.1943 -0.7079   0.4794
SiteBOR Op   -0.1088     0.7295 391.7815 -0.1492   0.8815
SiteIST Op   -0.9202     1.4487 391.9556 -0.6352   0.5257
SiteMAD Op   -2.3379     1.2160 391.7275 -1.9226   0.0553
SiteZUR Op   -1.3967     2.6111 386.5756 -0.5349   0.5930
time_point    0.7581     0.2856 105.3682  2.6541   0.0092
```

Factors
```
                                 Estimate Std. Error       df t value Pr(>|t|)
(Intercept)                       -3.9410     2.6901 384.7605 -1.4650   0.1437
Age                               -0.0369     0.0310 384.7870 -1.1895   0.2350
SiteBOR Op                        -0.2706     0.7712 384.9834 -0.3509   0.7258
SiteIST Op                         0.7583     1.5045 384.8911  0.5040   0.6146
SiteMAD Op                        -1.1961     1.3327 384.8978 -0.8975   0.3700
SiteZUR Op                         1.0905     2.7476 383.2312  0.3969   0.6917
'Prior Spine Surgery'Yes          -1.3170     0.6964 384.9787 -1.8912   0.0593
'Osteoporosis / osteopenia'Yes     0.7710     0.7629 384.9522  1.0105   0.3129
essg_categoryidiopathic            1.5950     0.7932 384.9510  2.0110   0.0450
essg_categoryothers               -0.9744     1.0397 384.8275 -0.9372   0.3493
Non_instrumented_segments         -0.0027     0.0992 384.8954 -0.0276   0.9780
inc_preop                         -0.1626     0.0323 384.9956 -5.0375   0.0000
preop                             -0.1048     0.0260 384.9930 -4.0327   0.0001
time_point                         0.7874     0.2661 102.9538  2.9592   0.0038
```

Pelvic Incidence
Base Time point 6W. Pelvic Incidence

Time evolution
```
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)   0.1797     0.1614 324.6985  1.1134   0.2663
time_point    0.0150     0.1057  94.1802  0.1420   0.8874
```

Preop & Inc preop variable: Pelvic Incidence

Basic Demographics

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	-0.2315	0.8371	374.0846	-0.2766	0.7822
Age	0.0103	0.0135	368.5958	0.7636	0.4456
SiteBOR Op	-0.4424	0.3314	365.0257	-1.3350	0.1827
SiteIST Op	0.6554	0.6423	366.2268	1.0205	0.3082
SiteMAD Op	-0.0005	0.5498	358.8589	-0.0009	0.9993
SiteZUR Op	-0.6815	1.1892	355.4247	-0.5731	0.5669
time_point	0.0131	0.1064	89.1892	0.1230	0.9024

Factors

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	1.2237	1.0863	291.7644	1.1265	0.2609
Age	-0.0014	0.0135	278.8640	-0.1017	0.9191
SiteBOR Op	-0.1289	0.3356	286.3440	-0.3840	0.7013
SiteIST Op	0.6087	0.6234	301.1406	0.9764	0.3296
SiteMAD Op	0.9914	0.5932	265.7742	1.6713	0.0958
SiteZUR Op	-0.0621	1.1283	188.6537	-0.0550	0.9562
'Prior Spine Surgery'Yes	-0.1622	0.3023	284.5313	-0.5366	0.5920
'Osteoporosis / osteopenia'Yes	0.2629	0.3591	305.3338	0.7321	0.4646
essg_categoryidiopathic	-0.5501	0.3381	264.1603	-1.6270	0.1049
essg_categoryothers	0.0884	0.4694	336.4743	0.1883	0.8508
Non_instrumented_segments	-0.0171	0.0425	281.2916	-0.4023	0.6877
inc_preop	-0.2197	0.0392	281.4838	-5.6083	0.0000
preop	-0.0126	0.0106	262.7055	-1.1930	0.2339
time_point	0.0406	0.0873	101.4361	0.4648	0.6431

Pelvic Tilt
Base Time point 6W. Pelvic Tilt

Time evolution

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	1.1117	0.2853	324.8825	3.8965	1e-04
time_point	0.9519	0.2464	93.4643	3.8634	2e-04

Preop & Inc preop variable: Pelvic Tilt
Basic Demographics

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	1.2369	1.5750	385.2741	0.7854	0.4327
Age	-0.0100	0.0256	385.9247	-0.3924	0.6950
SiteBOR Op	0.8534	0.6284	386.6728	1.3579	0.1753
SiteIST Op	-0.2245	1.2198	386.8806	-0.1841	0.8541
SiteMAD Op	0.5111	1.0430	386.5903	0.4900	0.6244
SiteZUR Op	-2.5322	2.2381	380.2666	-1.1314	0.2586
time_point	0.9562	0.2464	92.4792	3.8808	0.0002

Factors

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	0.8049	1.8827	379.4533	0.4276	0.6692
Age	-0.0128	0.0255	379.6749	-0.5015	0.6163
SiteBOR Op	0.3741	0.6389	378.5779	0.5855	0.5585
SiteIST Op	1.0242	1.1895	377.2719	0.8611	0.3898
SiteMAD Op	1.9761	1.0483	377.9896	1.8850	0.0602

```
SiteZUR Op                       -1.1204   2.1205 379.9918 -0.5284   0.5976
'Prior Spine Surgery'Yes         -0.4288   0.5936 379.3782 -0.7224   0.4705
'Osteoporosis / osteopenia'Yes   -0.4699   0.6375 379.7198 -0.7371   0.4615
essg_categoryidiopathic           0.3692   0.6384 379.2416  0.5784   0.5634
essg_categoryothers              -0.6951   0.8545 378.7840 -0.8134   0.4165
Non_instrumented_segments         0.0474   0.0864 379.6328  0.5484   0.5838
inc_preop                        -0.2954   0.0383 379.9038 -7.7225   0.0000
preop                            -0.0626   0.0319 379.5886 -1.9629   0.0504
time_point                        0.9887   0.2086  97.0582  4.7403   0.0000
```

Sacral Slope
Base Time point 6W. Sacral Slope

Time evolution
```
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)  -0.9747     0.3044 325.7735 -3.2024   0.0015
time_point   -0.9737     0.2543  93.6482 -3.8285   0.0002
```

Preop & Inc preop variable: Sacral Slope
Basic Demographics
```
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)  -1.9649     1.6591 387.2750 -1.1843   0.2370
Age           0.0287     0.0269 387.7117  1.0648   0.2876
SiteBOR Op   -1.4303     0.6602 387.9972 -2.1664   0.0309
SiteIST Op    1.0512     1.2826 387.3846  0.8196   0.4130
SiteMAD Op   -0.3318     1.0973 387.9970 -0.3024   0.7625
SiteZUR Op    1.5016     2.3592 384.1788  0.6365   0.5248
time_point   -0.9845     0.2530  93.4400 -3.8913   0.0002
```

Factors
```
                               Estimate Std. Error       df t value Pr(>|t|)
(Intercept)                      3.0946     2.1183 374.5280  1.4609   0.1449
Age                              0.0247     0.0257 372.8180  0.9606   0.3374
SiteBOR Op                      -0.2612     0.6536 369.6323 -0.3996   0.6897
SiteIST Op                       0.1298     1.2173 369.0302  0.1066   0.9151
SiteMAD Op                      -0.1748     1.0548 366.4873 -0.1657   0.8685
SiteZUR Op                       1.1206     2.1768 369.9309  0.5148   0.6070
'Prior Spine Surgery'Yes         0.5673     0.6248 371.4044  0.9080   0.3645
'Osteoporosis / osteopenia'Yes   0.9078     0.6436 375.1698  1.4106   0.1592
essg_categoryidiopathic         -0.8324     0.6594 369.6613 -1.2624   0.2076
essg_categoryothers              1.1445     0.8791 374.0877  1.3019   0.1938
Non_instrumented_segments       -0.0413     0.0878 369.3855 -0.4698   0.6388
inc_preop                       -0.3255     0.0360 373.8131 -9.0306   0.0000
preop                           -0.1002     0.0286 370.2065 -3.5081   0.0005
time_point                      -0.9913     0.1971  98.4473 -5.0287   0.0000
```

RLL
Base Time point 6W. RLL

Time evolution
```
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)  -0.3191     0.3187 334.3449 -1.0012   0.3175
```

```
time_point    -0.7815      0.2827 104.5635 -2.7645     0.0067
```

Preop & Inc preop variable: RLL
Basic Demographics
```
            Estimate Std. Error        df t value Pr(>|t|)
(Intercept)  -1.4907      1.7691 385.4713 -0.8427     0.3999
Age           0.0123      0.0287 386.0178  0.4286     0.6684
SiteBOR Op    0.3107      0.7045 386.6854  0.4410     0.6594
SiteIST Op    0.3037      1.3949 386.9072  0.2177     0.8277
SiteMAD Op    2.1687      1.1708 386.5891  1.8524     0.0647
SiteZUR Op    1.7436      2.5129 381.0054  0.6939     0.4882
time_point   -0.7780      0.2791 103.9381 -2.7874     0.0063
```

Factors
```
                                Estimate Std. Error        df t value Pr(>|t|)
(Intercept)                      -1.7414      2.1737 379.8251 -0.8012     0.4235
Age                               0.0183      0.0300 379.3457  0.6091     0.5428
SiteBOR Op                       -0.1512      0.7697 379.9610 -0.1964     0.8444
SiteIST Op                       -2.1219      1.4916 379.9915 -1.4226     0.1557
SiteMAD Op                        0.5838      1.3307 379.9687  0.4388     0.6611
SiteZUR Op                        0.5393      2.6987 377.3975  0.1998     0.8417
'Prior Spine Surgery'Yes          1.4462      0.6718 379.8052  2.1527     0.0320
'Osteoporosis / osteopenia'Yes   -1.0167      0.7379 379.7798 -1.3778     0.1691
essg_categoryidiopathic          -1.2427      0.7648 379.7306 -1.6250     0.1050
essg_categoryothers               0.7116      1.0053 379.9561  0.7078     0.4795
Non_instrumented_segments        -0.0621      0.1001 379.3902 -0.6202     0.5355
inc_preop                        -0.1753      0.0348 379.5320 -5.0299     0.0000
preop                            -0.1413      0.0322 379.7874 -4.3813     0.0000
time_point                       -0.8098      0.2626 101.8470 -3.0835     0.0026
```

Global Tilt
Base Time point 6W. Global Tilt

Time evolution
```
            Estimate Std. Error        df t value Pr(>|t|)
(Intercept)   0.9836      0.3009 313.1483  3.2683     0.0012
time_point    1.8400      0.2794 101.1771  6.5858     0.0000
```

Preop & Inc preop variable: Global Tilt
Basic Demographics
```
            Estimate Std. Error        df t value Pr(>|t|)
(Intercept)   0.8675      1.6964 359.7776  0.5114     0.6094
Age          -0.0081      0.0271 360.1655 -0.2987     0.7653
SiteBOR Op    1.1138      0.6631 361.5790  1.6795     0.0939
SiteIST Op   -0.2054      1.2851 363.5489 -0.1598     0.8731
SiteMAD Op   -0.4869      1.1662 361.8765 -0.4175     0.6766
SiteZUR Op   -0.7652      2.7228 353.6377 -0.2810     0.7788
time_point    1.8510      0.2804  99.1680  6.6015     0.0000
```

Factors
```
                        Estimate Std. Error        df t value Pr(>|t|)
(Intercept)               1.4192      2.1390 354.3366  0.6635     0.5074
Age                      -0.0311      0.0305 351.5065 -1.0199     0.3085
```

```
SiteBOR Op                        0.3187    0.7565 355.6764  0.4213    0.6738
SiteIST Op                       -0.2900    1.3330 356.4994 -0.2175    0.8279
SiteMAD Op                       -0.2509    1.2663 355.0906 -0.1981    0.8431
SiteZUR Op                       -1.9916    2.7409 347.5667 -0.7266    0.4679
'Prior Spine Surgery'Yes         -1.6773    0.6863 354.4506 -2.4438    0.0150
'Osteoporosis / osteopenia'Yes   -0.6386    0.7139 353.6409 -0.8945    0.3717
essg_categoryidiopathic           0.9085    0.7408 353.2080  1.2264    0.2209
essg_categoryothers              -0.0335    0.9583 356.2715 -0.0350    0.9721
Non_instrumented_segments         0.0576    0.0946 352.4596  0.6086    0.5432
inc_preop                        -0.0807    0.0369 352.2547 -2.1877    0.0293
preop                             0.0067    0.0314 351.7875  0.2129    0.8315
time_point                        1.8670    0.2758  97.8080  6.7703    0.0000
```

T1 Sagittal Tilt
Base Time point 6W. T1 Sagittal Tilt

```
Time evolution
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)  -0.2678     0.2110 229.7626 -1.2692   0.2056
time_point    0.3489     0.2037  57.9704  1.7128   0.0921
```

Preop & Inc preop variable: T1 Sagittal Tilt
Basic Demographics
```
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)  -2.4714     1.1046 279.7011 -2.2373   0.0261
Age           0.0348     0.0183 280.3162  1.8973   0.0588
SiteBOR Op   -0.0062     0.4693 278.9207 -0.0133   0.9894
SiteIST Op    0.6615     0.9850 283.3332  0.6715   0.5024
SiteMAD Op    0.3730     0.7690 282.8810  0.4851   0.6280
SiteZUR Op    1.3460     1.7198 273.8151  0.7827   0.4345
time_point    0.3452     0.1980  59.6612  1.7431   0.0865
```

```
Factors
                                 Estimate Std. Error       df t value Pr(>|t|)
(Intercept)                       -3.3433     1.4062 278.9954 -2.3775   0.0181
Age                                0.0105     0.0194 278.8996  0.5419   0.5883
SiteBOR Op                        -0.6340     0.4892 278.9870 -1.2960   0.1960
SiteIST Op                        -0.2699     1.0147 278.9982 -0.2660   0.7904
SiteMAD Op                         0.1091     0.7930 278.0136  0.1376   0.8906
SiteZUR Op                         0.3614     1.6800 278.8417  0.2151   0.8298
'Prior Spine Surgery'Yes          -1.5413     0.4416 278.9775 -3.4900   0.0006
'Osteoporosis / osteopenia'Yes     0.7953     0.4933 278.9065  1.6122   0.1081
essg_categoryidiopathic            0.5864     0.4676 278.9940  1.2541   0.2108
essg_categoryothers                0.7854     0.6322 278.9904  1.2423   0.2152
Non_instrumented_segments          0.1720     0.0582 278.9834  2.9544   0.0034
inc_preop                         -0.3733     0.0673 278.7093 -5.5438   0.0000
preop                             -0.2545     0.0647 278.9873 -3.9306   0.0001
time_point                         0.3533     0.1615  63.5658  2.1876   0.0324
```

Thoracolumbar L2-T10
Base Time point 6W. Thoracolumbar L2-T10

```
Time evolution
           Estimate Std. Error       df t value Pr(>|t|)
(Intercept)   0.1784     0.3989 265.5103  0.4471   0.6551
time_point   -0.0173     0.3741  68.1820 -0.0463   0.9632


Preop & Inc preop variable: Thoracolumbar L2-T10
Basic Demographics
           Estimate Std. Error       df t value Pr(>|t|)
(Intercept)  -1.4285     2.1342 330.4200 -0.6693   0.5037
Age           0.0439     0.0348 331.7126  1.2622   0.2078
SiteBOR Op   -1.2981     0.8724 332.5452 -1.4879   0.1377
SiteIST Op   -4.8916     1.6461 332.9989 -2.9716   0.0032
SiteMAD Op   -0.1555     1.5177 332.8973 -0.1024   0.9185
SiteZUR Op   -2.0490     3.6695 263.6156 -0.5584   0.5771
time_point    0.0000     0.3500  65.9540 -0.0001   0.9999


Factors
                                Estimate Std. Error       df t value Pr(>|t|)
(Intercept)                      -2.1324     2.7923 324.5533 -0.7637   0.4456
Age                               0.0509     0.0368 325.0164  1.3821   0.1679
SiteBOR Op                       -1.1222     0.9287 325.9153 -1.2084   0.2278
SiteIST Op                       -4.1875     1.6739 325.9645 -2.5016   0.0129
SiteMAD Op                       -0.8302     1.6041 325.9772 -0.5175   0.6051
SiteZUR Op                       -0.6310     3.7139 265.5559 -0.1699   0.8652
'Prior Spine Surgery'Yes         -1.7128     0.8609 325.5762 -1.9895   0.0475
'Osteoporosis / osteopenia'Yes   -0.6919     0.9870 325.5645 -0.7010   0.4838
essg_categoryidiopathic           1.0246     0.9552 325.6788  1.0727   0.2842
essg_categoryothers               0.8734     1.3771 325.8098  0.6343   0.5264
Non_instrumented_segments         0.1484     0.1241 325.4642  1.1952   0.2329
inc_preop                        -0.1821     0.0478 325.1972 -3.8116   0.0002
preop                            -0.1142     0.0411 325.7565 -2.7816   0.0057
time_point                        0.0228     0.3384  65.9012  0.0673   0.9466



### RSA
Base Time point 6W. RSA

Time evolution
           Estimate Std. Error       df t value Pr(>|t|)
(Intercept)   0.8767     0.2983 312.7298  2.9386   0.0035
time_point    1.8576     0.2748 100.5738  6.7586   0.0000


Preop & Inc preop variable: Global Tilt
Basic Demographics
           Estimate Std. Error       df t value Pr(>|t|)
(Intercept)   1.8987     2.3293 289.2574  0.8152   0.4157
Age          -0.0219     0.0369 288.8699 -0.5925   0.5540
SiteBOR Op    1.9000     0.9027 287.1087  2.1047   0.0362
SiteIST Op   -0.9824     1.7927 279.4042 -0.5480   0.5841
SiteMAD Op   -1.1890     1.5634 286.9089 -0.7605   0.4476
SiteZUR Op   -1.4802     3.9992 288.3453 -0.3701   0.7116
time_point    1.6404     0.3046 119.8279  5.3852   0.0000


Factors
```

```
                                Estimate Std. Error        df t value Pr(>|t|)
(Intercept)                       2.3895     2.8958 281.4408  0.8252   0.4100
Age                              -0.0538     0.0409 282.9085 -1.3162   0.1892
SiteBOR Op                        0.6365     1.0091 279.9294  0.6307   0.5287
SiteIST Op                       -1.3819     1.8229 274.8529 -0.7581   0.4491
SiteMAD Op                       -0.7504     1.6778 280.8661 -0.4472   0.6550
SiteZUR Op                       -3.3471     3.9610 282.2108 -0.8450   0.3988
'Prior Spine Surgery'Yes         -2.4720     0.9276 280.9580 -2.6648   0.0081
'Osteoporosis / osteopenia'Yes   -0.9647     0.9613 282.0789 -1.0036   0.3164
essg_categoryidiopathic           1.7148     1.0025 281.8452  1.7106   0.0883
essg_categoryothers              -0.4297     1.3065 277.2537 -0.3289   0.7425
Non_instrumented_segments         0.1070     0.1288 282.0349  0.8304   0.4070
inc_preop                        -0.1331     0.0496 282.6724 -2.6841   0.0077
preop                             0.0030     0.0420 282.8921  0.0719   0.9427
time_point                        1.6803     0.3005 113.8413  5.5919   0.0000
```

RPV
Base Time point 6W. RPV

Time evolution
```
            Estimate Std. Error        df t value Pr(>|t|)
(Intercept)  -1.0921     0.2863 326.3887 -3.8145     2e-04
time_point   -0.9687     0.2457  94.2508 -3.9434     2e-04
```

Preop & Inc preop variable: Sacral Slope
Basic Demographics
```
            Estimate Std. Error        df t value Pr(>|t|)
(Intercept)  -2.9445     2.1418 305.5423 -1.3748   0.1702
Age           0.0330     0.0345 303.0612  0.9582   0.3387
SiteBOR Op   -1.7650     0.8462 298.9343 -2.0858   0.0378
SiteIST Op    0.9644     1.6729 288.8323  0.5765   0.5647
SiteMAD Op   -0.5852     1.3879 299.8266 -0.4216   0.6736
SiteZUR Op    2.8243     2.9658 309.3812  0.9523   0.3417
time_point   -0.6971     0.2685 119.9658 -2.5962   0.0106
```

Factors
```
                                Estimate Std. Error        df  t value Pr(>|t|)
(Intercept)                       3.8216     2.4888 282.4972   1.5355   0.1258
Age                               0.0310     0.0301 279.7993   1.0308   0.3035
SiteBOR Op                       -0.1890     0.7610 275.1458  -0.2483   0.8041
SiteIST Op                       -0.6941     1.4462 267.5928  -0.4799   0.6317
SiteMAD Op                       -0.3219     1.2174 272.8441  -0.2644   0.7917
SiteZUR Op                        2.1688     2.4987 280.0052   0.8680   0.3861
'Prior Spine Surgery'Yes          1.0841     0.7332 276.2611   1.4785   0.1404
'Osteoporosis / osteopenia'Yes    1.5266     0.7561 283.0192   2.0192   0.0444
essg_categoryidiopathic          -0.8152     0.7770 271.7805  -1.0491   0.2951
essg_categoryothers               1.0614     1.0436 277.7483   1.0171   0.3100
Non_instrumented_segments        -0.0463     0.1040 269.7342  -0.4452   0.6565
inc_preop                        -0.4718     0.0423 280.9957 -11.1631   0.0000
preop                            -0.1410     0.0336 273.4461  -4.1960   0.0000
time_point                       -0.7315     0.2077 124.7926  -3.5212   0.0006
```