Pelvis UT vs Pelvis LT stability

- Upper Thoracic (UT): T1-T9-Pelvis
- Lower Thoracic (LT): T10-T12- Iliac

Selection criteria

```
data_ %<>% .['Posterior Instrumented Fusion' == 'Yes']

data_[, 'Posterior Instrumented Fusion: Upper / Lower Levels'] %>%
  sapply(. %>% strsplit('-') %>% .[[1]] %>% .[2]) ->
  post_intr_fusion

data_ %<>% .[post_intr_fusion == 'Iliac']

data_[, 'Posterior Instrumented Fusion: Upper / Lower Levels'] %>%
  sapply(. %>% strsplit('-') %>% .[[1]] %>% .[1]) ->
  post_intr_fusion

UT <- paste("T", 1:9, sep="")
LT <- paste("T", 10:12, sep="")

data_[post_intr_fusion %chin% UT, thoracic_type := 'UT']
data_[post_intr_fusion %chin% LT, thoracic_type := 'LT']

data_ %<>% .[!is.na(get(treatment_))]
```

Patients: 116

Increment = Future - Baseline

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)	-0.9644	0.5355	449.3540	-1.8010	0.0724
time_point	0.3287	0.2338	183.6953	1.4057	0.1615
thoracic_typeUT	-0.8040	0.6869	383.6804	-1.1706	0.2425

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	4.5179	3.6648	376.6505	1.2328	0.2184
Age	-0.0687	0.0406	379.0805	-1.6940	0.0911
SiteBOR Op	0.9075	1.0669	362.2650	0.8506	0.3956

```
SiteIST Op                           1.9402    2.1886 336.4655  0.8865   0.3760
SiteMAD Op                           1.6701    1.2546 361.2804  1.3311   0.1840
SiteZUR Op                           1.7780    2.4557 358.7859  0.7240   0.4695
'Prior Spine Surgery'Yes             1.8093    0.8464 368.4738  2.1377   0.0332
'Osteoporosis / osteopenia'Yes      -1.2580    0.7752 373.4056 -1.6228   0.1055
essg_categoryidiopathic             -0.4279    0.9130 367.6005 -0.4687   0.6396
essg_categoryothers                  1.6277    1.4389 383.6517  1.1312   0.2587
Non_instrumented_segments           -0.2170    0.1726 361.5951 -1.2575   0.2094
inc_preop                           -0.1763    0.0397 370.7716 -4.4445   0.0000
preop                               -0.0877    0.0300 386.9816 -2.9248   0.0036
time_point                           0.3144    0.2259 182.2765  1.3919   0.1656
thoracic_typeUT                     -1.9896    1.1592 362.0305 -1.7164   0.0870
```

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)     0.3627    1.2120 413.3986  0.2993   0.7649
time_point      0.1253    0.6641 148.3270  0.1886   0.8506
thoracic_typeUT -0.8067    1.6730 438.8210 -0.4822   0.6299
                          Estimate Std. Error      df t value Pr(>|t|)
(Intercept)                 7.6512    6.9283 419.0105  1.1043   0.2701
Age                         0.0358    0.0893 420.6076  0.4006   0.6890
SiteBOR Op                 -2.0245    2.0358 416.1329 -0.9944   0.3206
SiteIST Op                 -9.9762    4.5878 408.8564 -2.1745   0.0302
SiteMAD Op                 -4.0135    3.2418 410.5301 -1.2381   0.2164
SiteZUR Op                  5.5465    5.2126 428.8949  1.0641   0.2879
'Prior Spine Surgery'Yes    1.0890    1.7610 421.4153  0.6184   0.5366
'Osteoporosis / osteopenia'Yes  4.9921  1.8019 414.3250  2.7705   0.0058
essg_categoryidiopathic     6.4553    2.1250 417.3536  3.0378   0.0025
essg_categoryothers         2.5907    2.9506 410.8794  0.8780   0.3804
Non_instrumented_segments  -0.5557    0.4116 420.0616 -1.3502   0.1777
inc_preop                  -0.3481    0.0544 414.5788 -6.3981   0.0000
preop                      -0.3036    0.0572 412.3309 -5.3089   0.0000
time_point                  0.2333    0.5869 147.1784  0.3975   0.6916
thoracic_typeUT            -4.4091    2.6243 416.7539 -1.6801   0.0937
```

Sagittal Balance
Base Time point 6W. Sagittal Balance

Time evolution
```
              Estimate Std. Error      df t value Pr(>|t|)
(Intercept)     3.6869    3.0066 409.8276  1.2263   0.2208
time_point      6.9262    1.5656 144.9025  4.4241   0.0000
thoracic_typeUT -7.3915    4.1013 421.0717 -1.8022   0.0722
                          Estimate Std. Error      df t value Pr(>|t|)
(Intercept)               -31.8356   15.6706 402.6837 -2.0315   0.0429
Age                         0.3439    0.2112 405.4879  1.6287   0.1042
SiteBOR Op                 -5.9705    4.7690 399.0801 -1.2519   0.2113
SiteIST Op                -36.7446   11.8381 378.5856 -3.1039   0.0021
SiteMAD Op                 25.7135    7.0230 398.9966  3.6613   0.0003
```

```
SiteZUR Op                          -24.7125     13.5353 403.3673 -1.8258    0.0686
'Prior Spine Surgery'Yes            -15.4454      4.1136 400.8091 -3.7547    0.0002
'Osteoporosis / osteopenia'Yes       11.9017      4.2152 398.3955  2.8235    0.0050
essg_categoryidiopathic               8.2014      4.8433 403.0989  1.6934    0.0912
essg_categoryothers                  10.3952      6.9814 385.7092  1.4890    0.1373
Non_instrumented_segments             1.0916      0.9387 406.7781  1.1629    0.2456
inc_preop                            -0.4365      0.0643 403.1068 -6.7935    0.0000
preop                                -0.2128      0.0554 404.0290 -3.8444    0.0001
time_point                            7.2615      1.3577 134.4129  5.3485    0.0000
thoracic_typeUT                      -9.9462      5.9517 402.2229 -1.6712    0.0955
```

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

Time evolution
```
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)  -1.5724     0.6979 400.8399 -2.2529   0.0248
time_point    1.0272     0.3613 153.7157  2.8433   0.0051
thoracic_typeUT 2.3445   0.9347 407.7641  2.5082   0.0125
                          Estimate Std. Error       df t value Pr(>|t|)
(Intercept)                14.4729     3.9117 390.2887  3.7000   0.0002
Age                         0.0573     0.0482 390.1217  1.1880   0.2355
SiteBOR Op                 -0.0983     1.0972 385.9173 -0.0896   0.9287
SiteIST Op                 -6.5212     3.1473 360.8903 -2.0720   0.0390
SiteMAD Op                 -0.2582     1.5095 382.6673 -0.1711   0.8643
SiteZUR Op                  6.8955     2.6893 400.0434  2.5640   0.0107
'Prior Spine Surgery'Yes    2.4999     0.9500 388.0550  2.6315   0.0088
'Osteoporosis / osteopenia'Yes 0.2816  0.9403 383.5726  0.2994   0.7648
essg_categoryidiopathic    -2.9271     1.0702 386.8490 -2.7350   0.0065
essg_categoryothers        -2.9246     1.6281 381.4955 -1.7963   0.0732
Non_instrumented_segments  -1.6977     0.2138 389.0171 -7.9397   0.0000
inc_preop                  -0.4970     0.0652 388.3235 -7.6205   0.0000
preop                      -0.2626     0.0613 387.3873 -4.2842   0.0000
time_point                  1.0384     0.3067 161.2676  3.3859   0.0009
thoracic_typeUT            -3.5575     1.3940 385.2414 -2.5521   0.0111
```

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

Time evolution
```
            Estimate Std. Error       df t value Pr(>|t|)
(Intercept)   1.9371     0.6603 438.5201  2.9334   0.0035
time_point    1.3389     0.3584 164.2157  3.7359   0.0003
thoracic_typeUT -0.2949   0.9063 458.8361 -0.3254   0.7450
                          Estimate Std. Error       df t value Pr(>|t|)
(Intercept)                -1.8348     3.9566 441.0480 -0.4637   0.6431
Age                         0.0292     0.0478 442.6662  0.6115   0.5412
SiteBOR Op                  3.3706     1.1221 439.9769  3.0038   0.0028
SiteIST Op                 -0.3516     2.8388 400.2334 -0.1239   0.9015
SiteMAD Op                  2.1671     1.6686 439.9454  1.2987   0.1947
SiteZUR Op                 -3.9744     3.1708 444.4442 -1.2534   0.2107
'Prior Spine Surgery'Yes   -1.7269     1.0213 438.8530 -1.6909   0.0916
```

```
'Osteoporosis / osteopenia'Yes  -1.0201        0.9979 437.4525 -1.0223   0.3072
essg_categoryidiopathic          -0.2919        1.0578 441.9105 -0.2759   0.7827
essg_categoryothers               0.4851        1.6287 432.4358  0.2978   0.7660
Non_instrumented_segments         0.8894        0.2431 443.9376  3.6592   0.0003
inc_preop                        -0.2849        0.0440 440.2841 -6.4676   0.0000
preop                            -0.1714        0.0368 440.4567 -4.6554   0.0000
time_point                        1.3549        0.3206 157.2273  4.2255   0.0000
thoracic_typeUT                   2.0447        1.4196 440.9224  1.4403   0.1505
```

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

Time evolution
```
                Estimate Std. Error        df t value Pr(>|t|)
(Intercept)       2.0511     0.7225 437.6026  2.8389   0.0047
time_point        1.2682     0.3874 156.1776  3.2736   0.0013
thoracic_typeUT   1.6723     0.9774 455.3492  1.7110   0.0878
                               Estimate Std. Error        df t value Pr(>|t|)
(Intercept)                      7.2306     4.5135 440.5735  1.6020   0.1099
Age                              0.1053     0.0541 440.9675  1.9459   0.0523
SiteBOR Op                       3.8893     1.2529 438.6119  3.1042   0.0020
SiteIST Op                      -6.6307     3.1206 420.6136 -2.1248   0.0342
SiteMAD Op                       3.5512     1.8243 437.4432  1.9466   0.0522
SiteZUR Op                       3.8868     3.1475 445.9653  1.2349   0.2175
'Prior Spine Surgery'Yes         0.6274     1.1298 438.5639  0.5553   0.5789
'Osteoporosis / osteopenia'Yes  -0.6562     1.0715 435.4579 -0.6124   0.5406
essg_categoryidiopathic         -3.4092     1.1736 440.2297 -2.9049   0.0039
essg_categoryothers             -1.9541     1.7425 431.8374 -1.1214   0.2627
Non_instrumented_segments       -0.7601     0.2604 443.0836 -2.9186   0.0037
inc_preop                       -0.2048     0.0510 440.6903 -4.0179   0.0001
preop                           -0.1074     0.0383 439.9486 -2.8054   0.0052
time_point                       1.3073     0.3568 155.8384  3.6644   0.0003
thoracic_typeUT                 -2.3103     1.5669 439.7334 -1.4745   0.1411
```

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)       1.0394     0.5192 456.2909  2.0018   0.0459
time_point        0.6482     0.2867 167.1202  2.2605   0.0251
thoracic_typeUT   1.3731     0.7227 480.3592  1.9000   0.0580
                               Estimate Std. Error        df t value Pr(>|t|)
(Intercept)                     -8.7514     3.2448 461.3900 -2.6971   0.0073
Age                              0.0513     0.0387 462.5526  1.3255   0.1857
SiteBOR Op                      -0.2925     0.9358 459.2290 -0.3126   0.7547
SiteIST Op                      -1.2286     2.0405 439.5020 -0.6021   0.5474
SiteMAD Op                       0.5048     1.3439 456.0043  0.3756   0.7074
SiteZUR Op                      -0.5727     2.2220 464.0679 -0.2577   0.7967
'Prior Spine Surgery'Yes        -1.4168     0.7751 459.3635 -1.8279   0.0682
'Osteoporosis / osteopenia'Yes   1.7077     0.8004 456.0926  2.1336   0.0334
essg_categoryidiopathic          1.8654     0.9123 457.9511  2.0448   0.0414
```

```
essg_categoryothers                0.0065    1.3139 452.7011  0.0049    0.9961
Non_instrumented_segments         -0.3070    0.1767 462.2725 -1.7376    0.0830
inc_preop                         -0.2003    0.0342 458.6026 -5.8553    0.0000
preop                             -0.1579    0.0280 454.6261 -5.6430    0.0000
time_point                         0.6765    0.2590 171.7146  2.6120    0.0098
thoracic_typeUT                   -1.3552    1.1673 458.3282 -1.1610    0.2463
```

Pelvic Incidence
Base Time point 6W. Pelvic Incidence

Time evolution

```
                 Estimate Std. Error       df t value Pr(>|t|)
(Intercept)        0.3070     0.2314 466.4912  1.3270   0.1852
time_point         0.0821     0.1093 186.7685  0.7518   0.4531
thoracic_typeUT   -0.5417     0.3081 440.0628 -1.7579   0.0795
                             Estimate Std. Error       df t value Pr(>|t|)
(Intercept)                    0.8867     1.2552 381.3384  0.7065   0.4803
Age                            0.0004     0.0164 384.1894  0.0238   0.9811
SiteBOR Op                    -0.0806     0.3762 376.3180 -0.2142   0.8305
SiteIST Op                     1.3461     0.8073 377.3882  1.6675   0.0962
SiteMAD Op                     1.0214     0.6073 368.0300  1.6820   0.0934
SiteZUR Op                    -1.8930     0.8950 354.8011 -2.1151   0.0351
'Prior Spine Surgery'Yes      -0.6549     0.3221 373.2278 -2.0330   0.0428
'Osteoporosis / osteopenia'Yes 0.1842     0.3401 379.9689  0.5416   0.5884
essg_categoryidiopathic       -0.1812     0.3686 364.9351 -0.4916   0.6233
essg_categoryothers           -0.1626     0.5481 397.4831 -0.2968   0.7668
Non_instrumented_segments      0.1274     0.0741 366.1395  1.7181   0.0866
inc_preop                     -0.3089     0.0464 359.4086 -6.6580   0.0000
preop                         -0.0259     0.0117 367.3869 -2.2119   0.0276
time_point                     0.0821     0.0961 187.5300  0.8540   0.3942
thoracic_typeUT               -0.0245     0.4846 373.9011 -0.0505   0.9598
```

Pelvic Tilt
Base Time point 6W. Pelvic Tilt

Time evolution

```
                 Estimate Std. Error       df t value Pr(>|t|)
(Intercept)        2.0792     0.4293 458.3402  4.8429   0.0000
time_point         0.6899     0.2216 172.2546  3.1136   0.0022
thoracic_typeUT    1.5359     0.5869 466.8578  2.6171   0.0092
                             Estimate Std. Error       df t value Pr(>|t|)
(Intercept)                   -0.2767     2.1951 434.5832 -0.1261   0.8997
Age                            0.0194     0.0297 438.8393  0.6549   0.5129
SiteBOR Op                     0.6379     0.6832 431.1131  0.9337   0.3510
SiteIST Op                     0.5306     1.4235 413.7534  0.3728   0.7095
SiteMAD Op                     2.5140     0.9806 425.7099  2.5638   0.0107
SiteZUR Op                     0.1595     1.6023 432.0315  0.0995   0.9208
'Prior Spine Surgery'Yes      -0.3083     0.5727 431.0692 -0.5383   0.5906
'Osteoporosis / osteopenia'Yes -0.3222    0.5825 429.3562 -0.5532   0.5804
essg_categoryidiopathic        0.3742     0.6506 428.5785  0.5752   0.5655
essg_categoryothers           -0.5709     0.9542 433.1847 -0.5983   0.5500
Non_instrumented_segments      0.0848     0.1314 433.4898  0.6452   0.5192
```

```
inc_preop                        -0.4177   0.0370 436.3687 -11.2904   0.0000
preop                            -0.1024   0.0358 434.2260  -2.8576   0.0045
time_point                        0.6992   0.1779 186.8718   3.9299   0.0001
thoracic_typeUT                   0.1681   0.8452 430.4257   0.1988   0.8425
```

Sacral Slope
Base Time point 6W. Sacral Slope

Time evolution

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	-1.7121	0.4487	461.0464	-3.8153	0.0002
time_point	-0.6146	0.2273	175.1071	-2.7036	0.0075
thoracic_typeUT	-2.2994	0.6100	463.4635	-3.7695	0.0002

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	4.5671	2.2708	420.1638	2.0112	0.0449
Age	0.0160	0.0282	421.6587	0.5658	0.5718
SiteBOR Op	-0.8569	0.6796	416.9314	-1.2610	0.2080
SiteIST Op	1.1086	1.4181	403.3165	0.7818	0.4348
SiteMAD Op	-0.7623	0.9563	406.9515	-0.7971	0.4258
SiteZUR Op	-1.9880	1.5726	409.3321	-1.2641	0.2069
'Prior Spine Surgery'Yes	-0.4066	0.5684	413.4753	-0.7154	0.4747
'Osteoporosis / osteopenia'Yes	0.6005	0.5818	415.8258	1.0321	0.3026
essg_categoryidiopathic	-0.2791	0.6497	409.2864	-0.4295	0.6678
essg_categoryothers	1.3880	0.9619	422.0009	1.4430	0.1498
Non_instrumented_segments	0.0696	0.1303	413.3393	0.5337	0.5939
inc_preop	-0.4611	0.0340	423.5874	-13.5725	0.0000
preop	-0.1468	0.0259	405.6868	-5.6732	0.0000
time_point	-0.6264	0.1729	194.2401	-3.6223	0.0004
thoracic_typeUT	-0.1553	0.8457	413.2486	-0.1836	0.8544

RLL
Base Time point 6W. RLL

Time evolution

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	-1.2812	0.5057	453.2776	-2.5336	0.0116
time_point	-0.7098	0.2794	165.2916	-2.5400	0.0120
thoracic_typeUT	-0.9761	0.7009	476.5080	-1.3927	0.1643

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	1.3404	2.8535	457.1430	0.4698	0.6388
Age	-0.0879	0.0381	459.6790	-2.3084	0.0214
SiteBOR Op	0.0266	0.9121	455.2235	0.0292	0.9767
SiteIST Op	-0.6074	1.9879	436.0730	-0.3055	0.7601
SiteMAD Op	-1.1002	1.3379	452.2363	-0.8223	0.4113
SiteZUR Op	2.3842	2.1681	460.3608	1.0997	0.2720
'Prior Spine Surgery'Yes	2.0325	0.7542	455.6001	2.6951	0.0073
'Osteoporosis / osteopenia'Yes	-1.8548	0.7755	452.2296	-2.3917	0.0172
essg_categoryidiopathic	-1.7779	0.8823	454.3683	-2.0151	0.0445
essg_categoryothers	-0.4281	1.2692	449.0108	-0.3373	0.7361
Non_instrumented_segments	0.1375	0.1717	458.7574	0.8009	0.4236
inc_preop	-0.2063	0.0375	453.4710	-5.4950	0.0000
preop	-0.1915	0.0338	451.7143	-5.6714	0.0000

```
time_point                       -0.7343     0.2529 168.9130 -2.9036    0.0042
thoracic_typeUT                   1.1442     1.1271 454.7820  1.0152    0.3106
```

Global Tilt
Base Time point 6W. Global Tilt

Time evolution
```
              Estimate Std. Error       df t value Pr(>|t|)
(Intercept)     3.2881     0.4991 429.4189  6.5878    0.0000
time_point      1.6910     0.2582 172.2682  6.5491    0.0000
thoracic_typeUT -0.3743     0.6811 440.3753 -0.5496    0.5829
                             Estimate Std. Error       df t value Pr(>|t|)
(Intercept)                   -1.2574     2.7820 422.3241 -0.4520    0.6515
Age                            0.0520     0.0391 424.9469  1.3297    0.1843
SiteBOR Op                     0.8655     0.9219 417.1700  0.9388    0.3484
SiteIST Op                    -2.3351     1.8420 399.1827 -1.2677    0.2056
SiteMAD Op                     3.2030     1.3130 414.8326  2.4394    0.0151
SiteZUR Op                    -8.0491     2.1999 415.5342 -3.6589    0.0003
'Prior Spine Surgery'Yes      -1.4127     0.7488 417.1491 -1.8866    0.0599
'Osteoporosis / osteopenia'Yes -0.3520    0.7465 416.6909 -0.4715    0.6376
essg_categoryidiopathic        0.3837     0.8542 418.1915  0.4492    0.6535
essg_categoryothers            1.0904     1.2076 416.3303  0.9029    0.3671
Non_instrumented_segments     -0.0338     0.1689 423.6230 -0.2001    0.8415
inc_preop                     -0.0917     0.0411 418.3474 -2.2331    0.0261
preop                          0.0093     0.0363 421.4914  0.2567    0.7975
time_point                     1.7207     0.2370 170.5985  7.2601    0.0000
thoracic_typeUT               -1.8778     1.0744 419.5834 -1.7478    0.0812
```

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

Time evolution
```
              Estimate Std. Error       df t value Pr(>|t|)
(Intercept)     0.2362     0.4140 325.7006  0.5707    0.5686
time_point      0.5721     0.2160 107.4458  2.6481    0.0093
thoracic_typeUT -2.0021     0.5559 347.1918 -3.6014    0.0004
                             Estimate Std. Error       df t value Pr(>|t|)
(Intercept)                   -8.7533     2.1353 309.2939 -4.0993    0.0001
Age                            0.0582     0.0300 305.8090  1.9401    0.0533
SiteBOR Op                    -0.9952     0.6872 298.4682 -1.4482    0.1486
SiteIST Op                    -0.7887     1.5110 305.4356 -0.5220    0.6021
SiteMAD Op                     2.1119     0.9282 296.8571  2.2753    0.0236
SiteZUR Op                    -1.4142     1.4236 297.8335 -0.9934    0.3213
'Prior Spine Surgery'Yes      -1.7900     0.5697 303.0954 -3.1419    0.0018
'Osteoporosis / osteopenia'Yes 0.6944     0.5760 307.5370  1.2057    0.2289
essg_categoryidiopathic        0.9138     0.6313 300.7884  1.4474    0.1488
essg_categoryothers            1.6606     0.9308 312.0232  1.7839    0.0754
Non_instrumented_segments      0.3451     0.1256 314.4789  2.7480    0.0063
inc_preop                     -0.5882     0.0657 308.6264 -8.9481    0.0000
preop                         -0.3302     0.0640 301.8421 -5.1609    0.0000
time_point                     0.5277     0.1663 130.3674  3.1726    0.0019
thoracic_typeUT               -0.3618     0.8338 314.8097 -0.4339    0.6647
```

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

Time evolution

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	0.9719	0.6508	394.2953	1.4934	0.1361
time_point	0.1965	0.3663	133.4366	0.5363	0.5926
thoracic_typeUT	-0.6925	0.8904	421.6404	-0.7778	0.4371

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	1.5529	3.6817	408.3577	0.4218	0.6734
Age	-0.0162	0.0470	408.5076	-0.3446	0.7306
SiteBOR Op	0.4075	1.1142	406.6768	0.3657	0.7148
SiteIST Op	-6.2204	2.4077	385.3495	-2.5835	0.0101
SiteMAD Op	1.3378	1.6954	402.2605	0.7891	0.4305
SiteZUR Op	3.1179	2.7463	408.6239	1.1353	0.2569
'Prior Spine Surgery'Yes	-1.0789	0.9682	406.3346	-1.1143	0.2658
'Osteoporosis / osteopenia'Yes	-0.8006	1.0328	404.0756	-0.7752	0.4387
essg_categoryidiopathic	1.3788	1.1132	406.9600	1.2386	0.2162
essg_categoryothers	2.9512	1.6573	403.2846	1.7807	0.0757
Non_instrumented_segments	0.2571	0.2274	409.3437	1.1310	0.2587
inc_preop	-0.2874	0.0506	409.1846	-5.6829	0.0000
preop	-0.2374	0.0470	408.9603	-5.0514	0.0000
time_point	0.2460	0.3374	132.6371	0.7291	0.4672
thoracic_typeUT	-1.5040	1.4897	405.8540	-1.0097	0.3133

RSA
Base Time point 6W. RSA

Time evolution

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	3.1255	0.4903	429.2282	6.3742	0.0000
time_point	1.6629	0.2537	171.1961	6.5558	0.0000
thoracic_typeUT	-0.0990	0.6691	440.2909	-0.1479	0.8825

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	-2.2568	2.7080	417.8424	-0.8334	0.4051
Age	0.0819	0.0374	420.0522	2.1911	0.0290
SiteBOR Op	1.5568	0.9106	411.9947	1.7096	0.0881
SiteIST Op	-2.6384	1.7892	395.0925	-1.4747	0.1411
SiteMAD Op	3.7833	1.2572	407.6277	3.0092	0.0028
SiteZUR Op	-5.1424	2.1453	407.4822	-2.3970	0.0170
'Prior Spine Surgery'Yes	-1.2049	0.7300	410.9796	-1.6507	0.0996
'Osteoporosis / osteopenia'Yes	-0.3558	0.7260	411.9172	-0.4900	0.6244
essg_categoryidiopathic	0.0268	0.8482	411.3353	0.0316	0.9748
essg_categoryothers	0.2659	1.1973	413.2806	0.2221	0.8244
Non_instrumented_segments	-0.0349	0.1631	418.2549	-0.2136	0.8310
inc_preop	-0.2110	0.0478	413.0532	-4.4167	0.0000
preop	-0.1235	0.0472	412.2163	-2.6171	0.0092
time_point	1.7079	0.2273	174.4744	7.5139	0.0000
thoracic_typeUT	-1.8324	1.0449	414.5433	-1.7536	0.0802

RPV
Base Time point 6W. RPV

Time evolution

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	-1.9013	0.4272	460.0025	-4.4502	0.0000
time_point	-0.6589	0.2196	173.9914	-2.9998	0.0031
thoracic_typeUT	-1.9724	0.5829	466.9872	-3.3837	0.0008

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	0.6357	2.0676	423.7267	0.3075	0.7587
Age	-0.0205	0.0275	427.3634	-0.7447	0.4569
SiteBOR Op	-1.1632	0.6510	420.3177	-1.7869	0.0747
SiteIST Op	0.0587	1.3468	406.8719	0.0436	0.9652
SiteMAD Op	-2.0196	0.9152	412.5533	-2.2068	0.0279
SiteZUR Op	-1.2865	1.5083	416.7662	-0.8530	0.3942
‘Prior Spine Surgery‘Yes	0.2217	0.5446	418.2175	0.4071	0.6841
‘Osteoporosis / osteopenia‘Yes	0.4119	0.5522	420.1557	0.7461	0.4561
essg_categoryidiopathic	-0.2196	0.6166	415.0252	-0.3561	0.7219
essg_categoryothers	1.7150	0.9188	426.0220	1.8665	0.0627
Non_instrumented_segments	-0.0662	0.1232	420.1747	-0.5375	0.5912
inc_preop	-0.5115	0.0375	427.2532	-13.6288	0.0000
preop	-0.2561	0.0423	413.3848	-6.0589	0.0000
time_point	-0.6766	0.1655	192.2077	-4.0874	0.0001
thoracic_typeUT	-0.3351	0.8004	418.9726	-0.4187	0.6757