

5y followup analysis

```
xls_path <- '../..data/ESSG extraction June 2022_2nd report 5Y - ONLY DPS.xlsx'
```

Filters

```
# discarded_patients <- readLines('five_years/discarded_patients')  
#  
data_set %<>%  
  .[, `st1. Date of Stage` %>% as.Date() < as.Date('2016-6-1')]
```

FU Stats

```
data_set %<>%  
  .[, followup_2y :=  
    !is.na(`2 YEAR VISIT - Date of visit`) |  
    !is.na(`3 YEAR VISIT - Date of visit`)] %>%  
  .[, followup_5y :=  
    !is.na(`5 YEAR VISIT - Date of visit`) |  
    !is.na(`6 YEAR VISIT - Date of visit`)]  
  
followup_2y <- data_set %>%  
  .[followup_2y==TRUE] %>%  
  .[, `Code of the patient` %>% uniqueN]  
  
followup_5y <- data_set %>%  
  .[followup_5y==TRUE] %>%  
  .[, `Code of the patient` %>% uniqueN]  
  
total <- data_set[, .N]  
total_with_followup_2y <- data_set[followup_2y==TRUE, .N]  
perc_followup_2y <- round(followup_2y/total, 3)  
perc_followup_5y <- round(followup_5y/total, 3)  
perc_followup_5y_with_2y <- round(followup_5y/total_with_followup_2y, 3)
```

- Patients with at least 5 year from intervention (total variable): 290
- Patients with 2y number (followup_2y variable): 260
- Patients with 2y % (perc_followup_2y variable): 89.7
- Patients with 5y number (followup_5y variable): 200
- Patients with 5y % (perc_followup_5y variable): 69
- Patients (among 2y FU) with 5y % (perc_followup_5y_with_2y variable): 76.9

2Y FU follow per Site

	Site eligible	fu_2y
1: BCN Op	89	0.9325843
2: BOR Op	69	0.7826087
3: IST Op	5	0.8000000
4: MAD Op	45	0.8444444
5: ZUR Op	82	0.9878049

5Y FU follow per Site

	Site eligible	fu_5y
1: BCN Op	89	0.6966292
2: BOR Op	69	0.6666667
3: IST Op	5	0.4000000
4: MAD Op	45	0.6666667
5: ZUR Op	82	0.7317073

Complications during 2y depending on followup 5y

	followup_5y	complication_before_2y	low_ci	up_ci
1: has_followup		0.3281250	0.2656503	0.3973424
2: no_followup		0.3529412	0.2500198	0.4715894

HRQOL during 2y depending on followup 5y

2Y. ODI - Score (%)

	followup_5y	mean_outcome	sd_outcome
1: has_followup		28.47895	1.524920
2: no_followup		32.04615	2.463094

t-test p-value: 0.22890690946814

2Y. SRS22 - SRS Subtotal score

	followup_5y	mean_outcome	sd_outcome
1: has_followup		3.467513	0.0612156
2: no_followup		3.256364	0.1102405

t-test p-value: 0.101375705911792

2Y. SF36 - PCS

	followup_5y	mean_outcome	sd_outcome
1: has_followup		41.98246	0.7137836
2: no_followup		39.60079	1.3854180

t-test p-value: 0.14215929502299

2Y. SF36 - MCS

	followup_5y	mean_outcome	sd_outcome
1: has_followup		48.01227	0.9086793
2: no_followup		44.46159	1.6452547

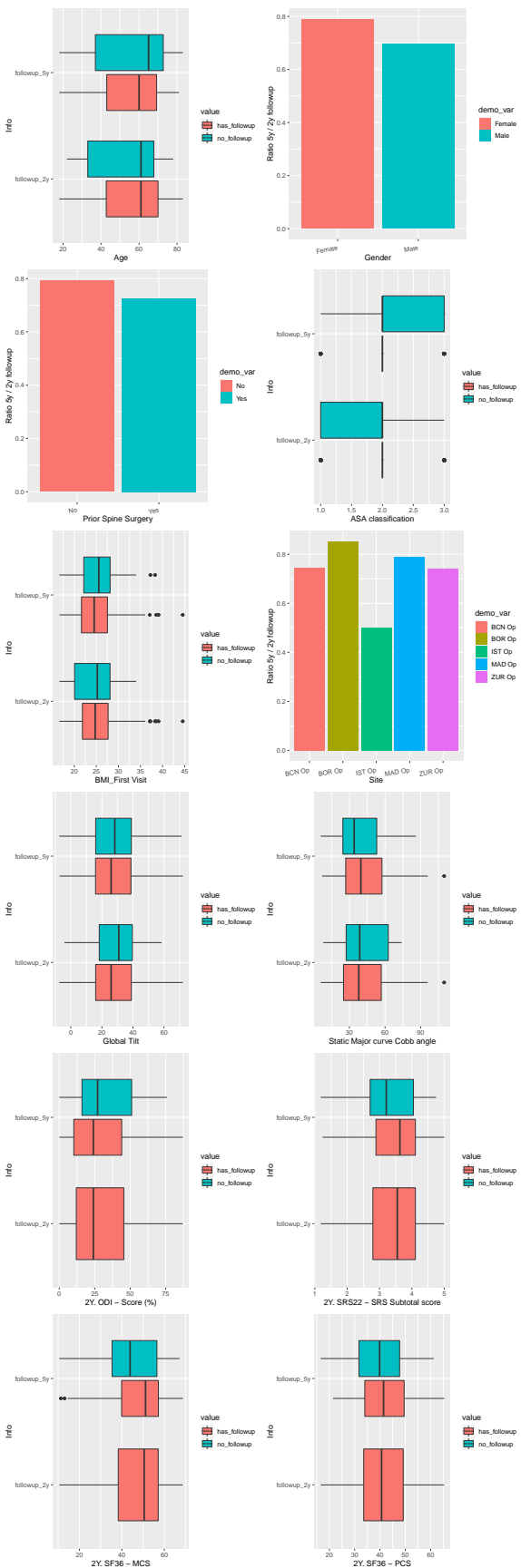
t-test p-value: 0.0700782006584998

2Y. SRS22 - Satisfaction with management

	followup_5y	mean_outcome	sd_outcome
1: has_followup		4.124339	0.07496084
2: no_followup		3.938462	0.12973907

t-test p-value: 0.226147630923752

Follow up



	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	0.881	0.140	6.300	0.000
Age	0.001	0.002	0.504	0.615
GenderMale	0.028	0.058	0.479	0.632
Prior_Spine_SurgeryYes	0.001	0.053	0.022	0.982
ASA_classification	-0.011	0.044	-0.259	0.796
BMI_First_Visit	0.001	0.006	0.174	0.862
SiteBOR Op	-0.155	0.067	-2.329	0.020
SiteIST Op	-0.127	0.181	-0.704	0.482
SiteMAD Op	-0.084	0.075	-1.119	0.264
SiteZUR Op	0.051	0.065	0.793	0.428
'5y_vs_2y_effect'	-0.101	0.198	-0.510	0.610
Age:'5y_vs_2y_effect'	0.001	0.002	0.271	0.787
GenderMale:'5y_vs_2y_effect'	-0.093	0.081	-1.144	0.253
Prior_Spine_SurgeryYes:'5y_vs_2y_effect'	-0.032	0.074	-0.429	0.668
ASA_classification:'5y_vs_2y_effect'	-0.106	0.063	-1.694	0.091
BMI_First_Visit:'5y_vs_2y_effect'	0.003	0.008	0.371	0.710
SiteBOR Op:'5y_vs_2y_effect'	0.082	0.094	0.866	0.387
SiteIST Op:'5y_vs_2y_effect'	-0.141	0.256	-0.549	0.583
SiteMAD Op:'5y_vs_2y_effect'	0.066	0.106	0.623	0.533
SiteZUR Op:'5y_vs_2y_effect'	0.008	0.092	0.084	0.933

	Estimate	Std. Error	t value
(Intercept)	0.840	0.142	5.935
Age	0.002	0.001	1.335
GenderMale	0.006	0.045	0.146
Prior_Spine_SurgeryYes	0.012	0.039	0.309
ASA_classification	-0.065	0.032	-2.014
BMI_First_Visit	0.004	0.004	0.824
SiteBOR Op	-0.097	0.051	-1.911
SiteIST Op	-0.158	0.143	-1.102
SiteMAD Op	-0.059	0.055	-1.069
SiteZUR Op	0.061	0.051	1.214
Global_Tilt	-0.001	0.002	-0.576
Static_Major_curve_Cobb_angle	0.001	0.001	0.693
'5y_vs_2y_effect'	-0.263	0.101	-2.607
Global_Tilt:'5y_vs_2y_effect'	0.000	0.002	0.061
Static_Major_curve_Cobb_angle:'5y_vs_2y_effect'	0.002	0.002	0.965

	Pr(> t)
(Intercept)	0.000
Age	0.183
GenderMale	0.884
Prior_Spine_SurgeryYes	0.758
ASA_classification	0.045
BMI_First_Visit	0.411
SiteBOR Op	0.057
SiteIST Op	0.271
SiteMAD Op	0.286
SiteZUR Op	0.225
Global_Tilt	0.565
Static_Major_curve_Cobb_angle	0.489
'5y_vs_2y_effect'	0.009
Global_Tilt:'5y_vs_2y_effect'	0.952
Static_Major_curve_Cobb_angle:'5y_vs_2y_effect'	0.335

5y selection bias

Demographics

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	0.796	0.171	4.659	0.000
Age	0.001	0.002	0.379	0.705
GenderMale	-0.070	0.068	-1.036	0.301
'Prior Spine Surgery'Yes	-0.023	0.063	-0.370	0.712
'ASA classification'	-0.098	0.054	-1.823	0.069
'BMI_First Visit'	0.005	0.007	0.672	0.502
SiteBOR Op	0.007	0.082	0.087	0.931
SiteIST Op	-0.200	0.230	-0.871	0.384
SiteMAD Op	-0.001	0.090	-0.015	0.988
SiteZUR Op	0.035	0.075	0.462	0.644

Radiology

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	0.592	0.223	2.659	0.008
Age	0.002	0.002	0.668	0.505
GenderMale	-0.074	0.074	-0.999	0.319
'Prior Spine Surgery'Yes	-0.005	0.067	-0.082	0.935
'ASA classification'	-0.116	0.055	-2.113	0.036
'BMI_First Visit'	0.008	0.007	1.091	0.276
SiteBOR Op	0.028	0.087	0.321	0.749
SiteIST Op	0.014	0.262	0.052	0.958
SiteMAD Op	0.014	0.094	0.148	0.882
SiteZUR Op	0.075	0.083	0.900	0.369
'Global Tilt'	0.000	0.002	0.173	0.863
'Static Major curve Cobb angle'	0.002	0.002	1.193	0.234

Increment of quality of life

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	0.564	0.244	2.315	0.022
Age	0.002	0.002	0.732	0.465
GenderMale	-0.006	0.078	-0.078	0.938
'Prior Spine Surgery'Yes	0.006	0.069	0.081	0.936
'ASA classification'	-0.059	0.060	-0.991	0.323
'BMI_First Visit'	0.005	0.008	0.660	0.510
SiteBOR Op	0.022	0.090	0.248	0.804
SiteMAD Op	-0.020	0.098	-0.208	0.835
SiteZUR Op	0.004	0.089	0.046	0.963
'Global Tilt'	-0.001	0.002	-0.230	0.818
'Static Major curve Cobb angle'	0.002	0.002	1.112	0.268
'2Y. ODI - Score (%)_inc'	0.003	0.003	1.223	0.223
'2Y. SRS22 - SRS Subtotal score_inc'	-0.061	0.081	-0.752	0.453
'2Y. SF36 - MCS_inc'	0.005	0.003	1.496	0.136
'2Y. SF36 - PCS_inc'	0.012	0.005	2.385	0.018

MCIDS

```
$'5Y. ODI - Score (%)'  
[1] 12.8
```

```
$'5Y. SRS22 - SRS Subtotal score'  
[1] 0.43
```

```
$'5Y. SF36 - PCS'  
[1] 4.9
```

	variable	inc_2y_percent	inc_5y_percent	p_val_two_previous
1	ODI - Score (%)	45.2	43.5	0.794
2	SRS22 - SRS Subtotal score	61.5	56.1	0.310
3	SF36 - PCS	53.6	54.3	0.949

	inc_5y_2y_percent
1	12.8
2	18.7
3	21.1

PASS

```
$'5Y. ODI - Score (%)'  
[1] 18
```

```
$'5Y. SRS22 - SRS Subtotal score'  
[1] 3.5
```

	variable	prop_2y	prop_5y	p_val
1	ODI - Score (%)	34.9	36.4	0.817
2	SRS22 - SRS Subtotal score	49.0	49.0	1.000