

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

We finally stick to those with 2y FU

```
data_set %<>%  
  .[followup_2y==TRUE]
```

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

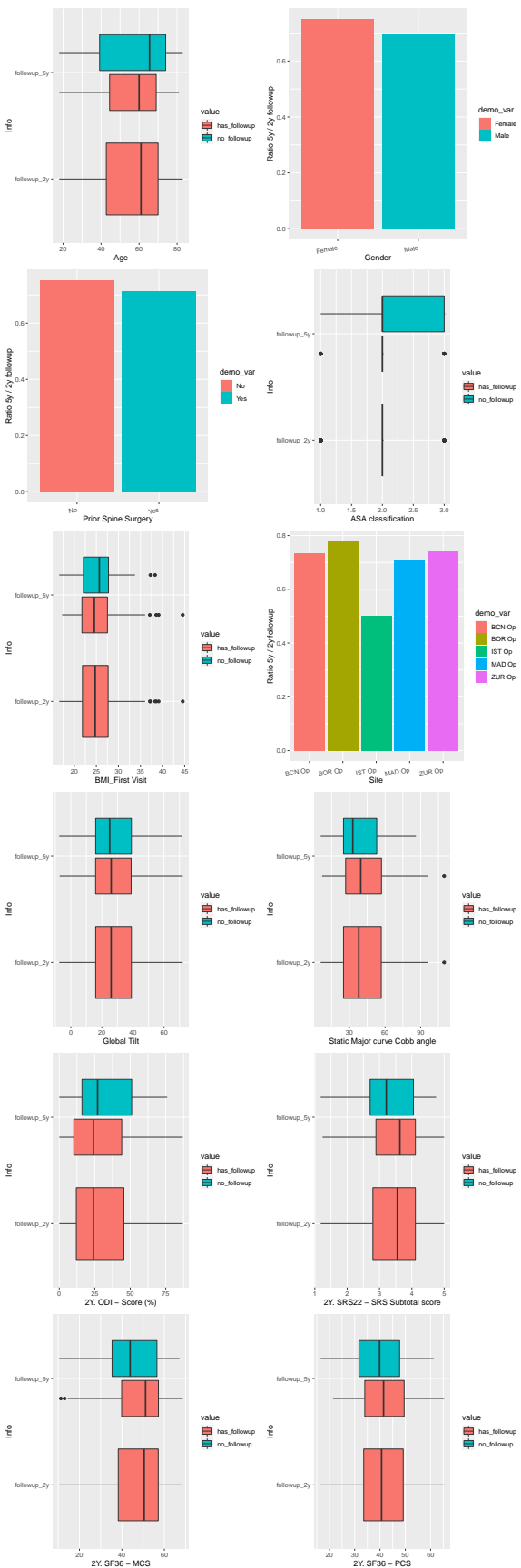
2Y. SF36 - MCS

	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)	1.000	0.121	8.279	0.000
Age	0.000	0.001	0.000	1.000
GenderMale	0.000	0.048	0.000	1.000
Prior_Spine_SurgeryYes	0.000	0.044	0.000	1.000
ASA_classification	0.000	0.038	0.000	1.000
BMI_First_Visit	0.000	0.005	0.000	1.000
SiteBOR Op	0.000	0.058	0.000	1.000
SiteIST Op	0.000	0.162	0.000	1.000
SiteMAD Op	0.000	0.064	0.000	1.000
SiteZUR Op	0.000	0.053	0.000	1.000
'5y_vs_2y_effect'	-0.204	0.171	-1.195	0.233
Age:'5y_vs_2y_effect'	0.001	0.002	0.379	0.705
GenderMale:'5y_vs_2y_effect'	-0.070	0.068	-1.036	0.301
Prior_Spine_SurgeryYes:'5y_vs_2y_effect'	-0.023	0.063	-0.370	0.712
ASA_classification:'5y_vs_2y_effect'	-0.098	0.054	-1.823	0.069
BMI_First_Visit:'5y_vs_2y_effect'	0.005	0.007	0.672	0.502
SiteBOR Op:'5y_vs_2y_effect'	0.007	0.082	0.087	0.931
SiteIST Op:'5y_vs_2y_effect'	-0.200	0.230	-0.871	0.384
SiteMAD Op:'5y_vs_2y_effect'	-0.001	0.090	-0.015	0.988
SiteZUR Op:'5y_vs_2y_effect'	0.035	0.075	0.462	0.644

	Estimate	Std. Error	t value
(Intercept)	0.958	0.118	8.095
Age	0.001	0.001	0.670
GenderMale	-0.037	0.037	-1.002
Prior_Spine_SurgeryYes	-0.003	0.033	-0.082
ASA_classification	-0.058	0.027	-2.120
BMI_First_Visit	0.004	0.004	1.094
SiteBOR Op	0.014	0.044	0.322
SiteIST Op	0.007	0.131	0.052
SiteMAD Op	0.007	0.047	0.149
SiteZUR Op	0.037	0.041	0.903
Global_Tilt	0.000	0.001	-0.083
Static_Major_curve_Cobb_angle	0.000	0.001	0.186
'5y_vs_2y_effect'	-0.324	0.082	-3.944
Global_Tilt:'5y_vs_2y_effect'	0.001	0.002	0.347
Static_Major_curve_Cobb_angle:'5y_vs_2y_effect'	0.002	0.001	1.098

	Pr(> t)
(Intercept)	0.000
Age	0.503
GenderMale	0.317
Prior_Spine_SurgeryYes	0.934
ASA_classification	0.035
BMI_First_Visit	0.274
SiteBOR Op	0.748
SiteIST Op	0.958
SiteMAD Op	0.882
SiteZUR Op	0.367
Global_Tilt	0.934
Static_Major_curve_Cobb_angle	0.853
'5y_vs_2y_effect'	0.000
Global_Tilt:'5y_vs_2y_effect'	0.729
Static_Major_curve_Cobb_angle:'5y_vs_2y_effect'	0.273

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	43.8	0.841
2	SRS22 - SRS Subtotal score	61.5	56.1	0.312
3	SF36 - PCS	53.6	54.5	0.920

	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	35.8	0.92
2	SRS22 - SRS Subtotal score	49.0	49.5	1.00