

# 5y complications analysis

## All

```
xls_path <- '../..//data/Dataset 4th report 5Y - ONLY DPS.xlsx'
```

## Filters

### Major Complications

- Total patients: 608
- Complications before 2 years: 353
- Patients with complications before 2 years: 146
- Proportion of patients with complications before 2 years: 0.2401316
- Complications between 2y and 5y: 83
- Patients with complications before 5 years: 40
- Proportion of patients with complications between 2y and 5y: 0.0657895
- p-value testing equality between proportions of complications:  $5.9967239 \times 10^{-17}$

### Category

Central neurologic complications	Iatrogenic
11	25
Mechanical complications	Medical
157	50
Pain Peripheral neurologic complications	
12	35
Wound infections	Wound problems
48	15

### Category

Central neurologic complications	Iatrogenic
0.03116147	0.07082153
Mechanical complications	Medical
0.44475921	0.14164306
Pain Peripheral neurologic complications	
0.03399433	0.09915014
Wound infections	Wound problems
0.13597734	0.04249292

## Minor Complications

- Total patients: 608
- Complications before 2 years: 401
- Patients with complications before 2 years: 223
- Proportion of patients with complications before 2 years: 0.3667763
- Complications between 2y and 5y: 35
- Patients with complications before 5 years: 28
- Proportion of patients with complications between 2y and 5y: 0.0460526
- p-value testing equality between proportions of complications:  $5.4020851 \times 10^{-43}$

### Category

Central neurologic complications	Iatrogenic
2	66
Mechanical complications	Medical
64	169
Pain Peripheral neurologic complications	
18	50
Wound infections	Wound problems
12	20

### Category

Central neurologic complications	Iatrogenic
0.004987531	0.164588529
Mechanical complications	Medical
0.159600998	0.421446384
Pain Peripheral neurologic complications	
0.044887781	0.124688279
Wound infections	Wound problems
0.029925187	0.049875312

## Non depuy

```
xls_path <- '../..data/ESSG Extraction_DEC_OP_ NON DePuy v7.xlsx'
```

### Filters

#### Major Complications

- Total patients: 708
- Complications before 2 years: 219
- Patients with complications before 2 years: 122
- Proportion of patients with complications before 2 years: 0.1723164

- Complications between 2y and 5y: 35
- Patients with complications before 5 years: 27
- Proportion of patients with complications between 2y and 5y: 0.0381356
- p-value testing equality between proportions of complications:  $3.9200916 \times 10^{-16}$

Category	
Central neurologic complications	Infectious complications
2	29
Mechanical complications	Other complications
111	48
Peripheral neurologic complications	
29	

Category	
Central neurologic complications	Infectious complications
0.00913242	0.13242009
Mechanical complications	Other complications
0.50684932	0.21917808
Peripheral neurologic complications	
0.13242009	

### Minor Complications

- Total patients: 708
- Complications before 2 years: 221
- Patients with complications before 2 years: 137
- Proportion of patients with complications before 2 years: 0.1935028
- Complications between 2y and 5y: 31
- Patients with complications before 5 years: 24
- Proportion of patients with complications between 2y and 5y: 0.0338983
- p-value testing equality between proportions of complications:  $6.8561674 \times 10^{-21}$

Category	
Central neurologic complications	Infectious complications
1	8
Mechanical complications	Other complications
96	74
Peripheral neurologic complications	
42	

Category	
Central neurologic complications	Infectious complications
0.004524887	0.036199095
Mechanical complications	Other complications
0.434389140	0.334841629
Peripheral neurologic complications	
0.190045249	

## 2YFU

```
xls_path <- '../..//data/Dataset 4th report 5Y - ONLY DPS.xlsx'
```

### Filters

#### Major Complications

- Total patients: 260
- Complications before 2 years: 222
- Patients with complications before 2 years: 87
- Proportion of patients with complications before 2 years: 0.3346154
- Complications between 2y and 5y: 69
- Patients with complications before 5 years: 36
- Proportion of patients with complications between 2y and 5y: 0.1384615
- p-value testing equality between proportions of complications:  $2.4735504 \times 10^{-7}$

#### Category

Central neurologic complications	Iatrogenic
10	16
Mechanical complications	Medical
104	28
Pain Peripheral neurologic complications	
9	17
Wound infections	Wound problems
26	12

#### Category

Central neurologic complications	Iatrogenic
0.04504505	0.07207207
Mechanical complications	Medical
0.46846847	0.12612613
Pain Peripheral neurologic complications	
0.04054054	0.07657658
Wound infections	Wound problems
0.11711712	0.05405405

#### Minor Complications

- Total patients: 260
- Complications before 2 years: 216
- Patients with complications before 2 years: 126
- Proportion of patients with complications before 2 years: 0.4846154

- Complications between 2y and 5y: 29
- Patients with complications before 5 years: 23
- Proportion of patients with complications between 2y and 5y: 0.0884615
- p-value testing equality between proportions of complications:  $4.4708059 \times 10^{-23}$

Category	Iatrogenic	Mechanical complications
	47	42
	Medical	Pain
	76	7
Peripheral neurologic complications		Wound infections
	28	6
	Wound problems	
	10	

Category	Iatrogenic	Mechanical complications
	0.21759259	0.19444444
	Medical	Pain
	0.35185185	0.03240741
Peripheral neurologic complications		Wound infections
	0.12962963	0.02777778
	Wound problems	
	0.04629630	

## Comparations

### All vs nondepuy

#### Major

	complication	p_val
1	Central neurologic complications	1.527692e-01
2	Iatrogenic	1.351494e-04
3	Mechanical complications	1.737238e-01
4	Medical	1.363506e-08
5	Pain	1.399137e-02
6	Peripheral neurologic complications	2.754738e-01
7	Wound infections	2.916764e-08
8	Wound problems	4.769150e-03
9	Infectious complications	9.032626e-12
10	Other complications	1.640947e-19

#### Minor

	complication	p_val
1	Central neurologic complications	1.000000e+00
2	Iatrogenic	4.292456e-10
3	Mechanical complications	1.282604e-13

4	Medical	3.459322e-29
5	Pain	3.215574e-03
6	Peripheral neurologic complications	3.757322e-02
7	Wound infections	2.188795e-02
8	Wound problems	1.705380e-03
9	Infectious complications	5.342882e-04
10	Other complications	2.560382e-34

## Before 2YFU vs nondepuy

### Major

	complication	p_val
1	Central neurologic complications	4.287279e-02
2	Iatrogenic	1.492551e-04
3	Mechanical complications	4.771090e-01
4	Medical	1.644718e-07
5	Pain	7.500981e-03
6	Peripheral neurologic complications	7.798645e-02
7	Wound infections	5.207267e-07
8	Wound problems	1.394858e-03
9	Infectious complications	6.048024e-08
10	Other complications	4.610594e-13

### Minor

	complication	p_val
1	Iatrogenic	6.666733e-13
2	Mechanical complications	1.208639e-07
3	Medical	1.010442e-21
4	Pain	2.051246e-02
5	Peripheral neurologic complications	1.115732e-01
6	Wound infections	3.718223e-02
7	Wound problems	3.545768e-03
8	Central neurologic complications	1.000000e+00
9	Infectious complications	1.368825e-02
10	Other complications	3.462532e-20