

5y complications analysis

All

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

Filters

Major Complications

- Total patients: 608
- Complications before 2 years: 326
- Eligible patients with 2Y: 434
- Patients with complications before 2 years: 131
- Proportion of patients with complications before 2 years: 0.3018433
- Complications between 2y and 5y: 65
- Eligible patients with 2Y and 5Y: 216
- Patients with complications before 5 years: 34
- Proportion of patients with complications between 2y and 5y: 0.1574074
- p-value testing equality between proportions of complications: 1.0028248×10^{-4}

Complications 2Y

	Category	pats_n	prop
1:	Infections	34	0.07834101
2:	Medical	25	0.05760369
3:	Neurological	32	0.07373272
4:	Mechanical complications	71	0.16359447
5:	Iatrogenic	19	0.04377880
6:	Wound problems	15	0.03456221
7:	Pain	10	0.02304147

Complications between 2Y and 5Y

	Category	pats_n	prop
1:	Mechanical complications	24	0.11111111
2:	Neurological	4	0.018518519
3:	Pain	7	0.032407407
4:	Wound problems	2	0.009259259
5:	Infections	1	0.004629630
6:	Iatrogenic	1	0.004629630

Minor Complications

- Total patients: 608
- Complications before 2 years: 344
- Eligible patients with 2Y: 434
- Patients with complications before 2 years: 186
- Proportion of patients with complications before 2 years: 0.4285714
- Complications between 2y and 5y: 26
- Eligible patients with 2Y and 5Y: 216
- Patients with complications before 5 years: 21
- Proportion of patients with complications between 2y and 5y: 0.0972222
- p-value testing equality between proportions of complications: $2.8635981 \times 10^{-17}$

Complications 2Y

	Category	pats_n	prop
1:	Mechanical complications	45	0.10368664
2:	Iatrogenic	55	0.12672811
3:	Wound problems	17	0.03917051
4:	Medical	86	0.19815668
5:	Neurological	38	0.08755760
6:	Infections	10	0.02304147
7:	Pain	14	0.03225806

Complications between 2Y and 5Y

	Category	pats_n	prop
1:	Mechanical complications	19	0.08796296
2:	Pain	1	0.00462963
3:	Neurological	1	0.00462963

Reinterventions

- Patients with reintervention before 2 years: 111
- Reinterventions between 2y and 5y: 47

Non depuy

```
xls_path <- '../..data/ESSG Extraction_DEC_OP_ NON DePuy v8.xlsx'
```

Filters

Major Complications

- Total patients: 708
- Complications before 2 years: 159
- Eligible patients with 2Y: 465
- Patients with complications before 2 years: 91
- Proportion of patients with complications before 2 years: 0.1956989
- Complications between 2y and 5y: 18
- Eligible patients with 2Y and 5Y: 199
- Patients with complications before 5 years: 13
- Proportion of patients with complications between 2y and 5y: 0.0653266
- p-value testing equality between proportions of complications: 3.8207953×10^{-5}

Complications 2Y

	Category	pats_n	prop
1:	Mechanical complications	53	0.11397849
2:	Other complications	31	0.06666667
3:	Neurological	15	0.03225806
4:	Infections	14	0.03010753

Complications between 2Y and 5Y

	Category	pats_n	prop
1:	Other complications	1	0.005025126
2:	Mechanical complications	12	0.060301508

Minor Complications

- Total patients: 708
- Complications before 2 years: 127
- Eligible patients with 2Y: 465
- Patients with complications before 2 years: 84
- Proportion of patients with complications before 2 years: 0.1806452
- Complications between 2y and 5y: 22
- Eligible patients with 2Y and 5Y: 199
- Patients with complications before 5 years: 16
- Proportion of patients with complications between 2y and 5y: 0.080402
- p-value testing equality between proportions of complications: 0.0014216

Complications 2Y

	Category	pats_n	prop
1:	Other complications	19	0.040860215
2:	Mechanical complications	57	0.122580645
3:	Infections	3	0.006451613
4:	Neurological	17	0.036559140

Complications between 2Y and 5Y

	Category	pats_n	prop
1:	Mechanical complications	16	0.08040201

Reinterventions

- Patients with reintervention before 2 years: 103
- Reinterventions between 2y and 5y: 48

Comparations

All vs nondepu 2Y

Major

P-value: Proportion 2y depuy vs non depuy

```
## [1] 0.000305609
```

	complication	p_val
1	Infections	0.002168948
2	Neurological	0.008247793
3	Mechanical complications	0.039490911

Minor

P-value: Proportion before 2y vs non depuy

```
## [1] 9.700817e-16
```

	complication	p_val
1	Mechanical complications	0.431073975
2	Neurological	0.002295834
3	Infections	0.071455033

Reinterventions

	patients_reintervention	eligible	proportion
depuy	111	434	0.2557604
nondepuy	103	465	0.2215054

p-value on the proportion of patients with reinterventions among eligible patients between 2Y and 5Y

```
[1] 0.259852
```

All vs nondepuyl between 2Y and 5Y

Major

P-value: Proportion 2y and 5Y depuy vs non depuy

```
## [1] 0.005076775
```

	complication	p_val
1 Mechanical complications		0.09638577

Minor

P-value: Proportion between 2y and 5y depuy vs non depuy

```
## [1] 0.6684295
```

	complication	p_val
1 Mechanical complications		0.920256

Reinterventions

	patients_reintervention	eligible	proportion
depuy	47	216	0.2175926
nondepuy	48	199	0.2412060

p-value on the proportion of patients with reinterventions among eligible patients with 2Y

```
[1] 0.6490603
```