

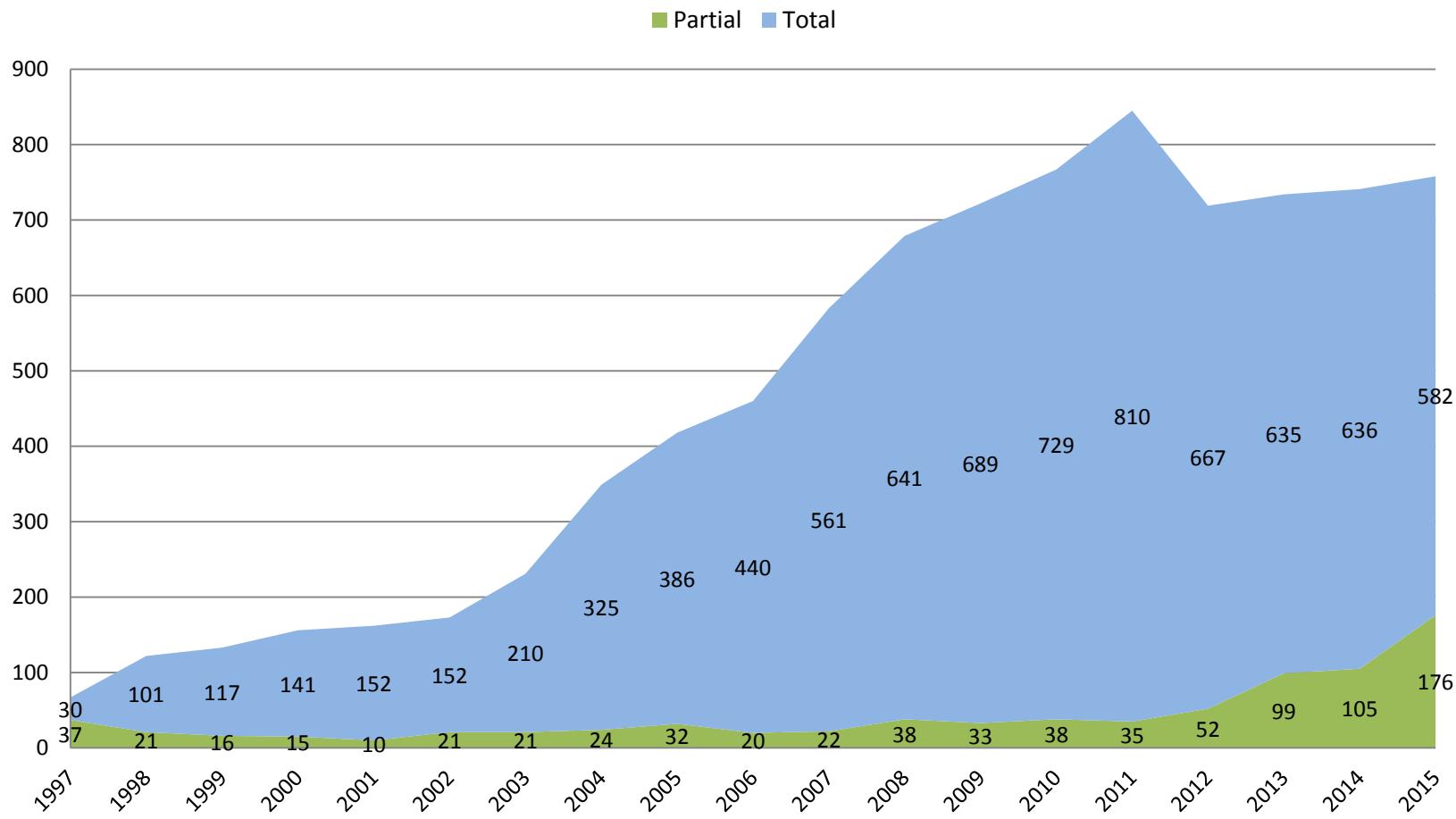
Valdoltra Knee Arthroplasty Registry 2002 - 2015

Vesna Levašić
Ingrid Milošev
October 2017

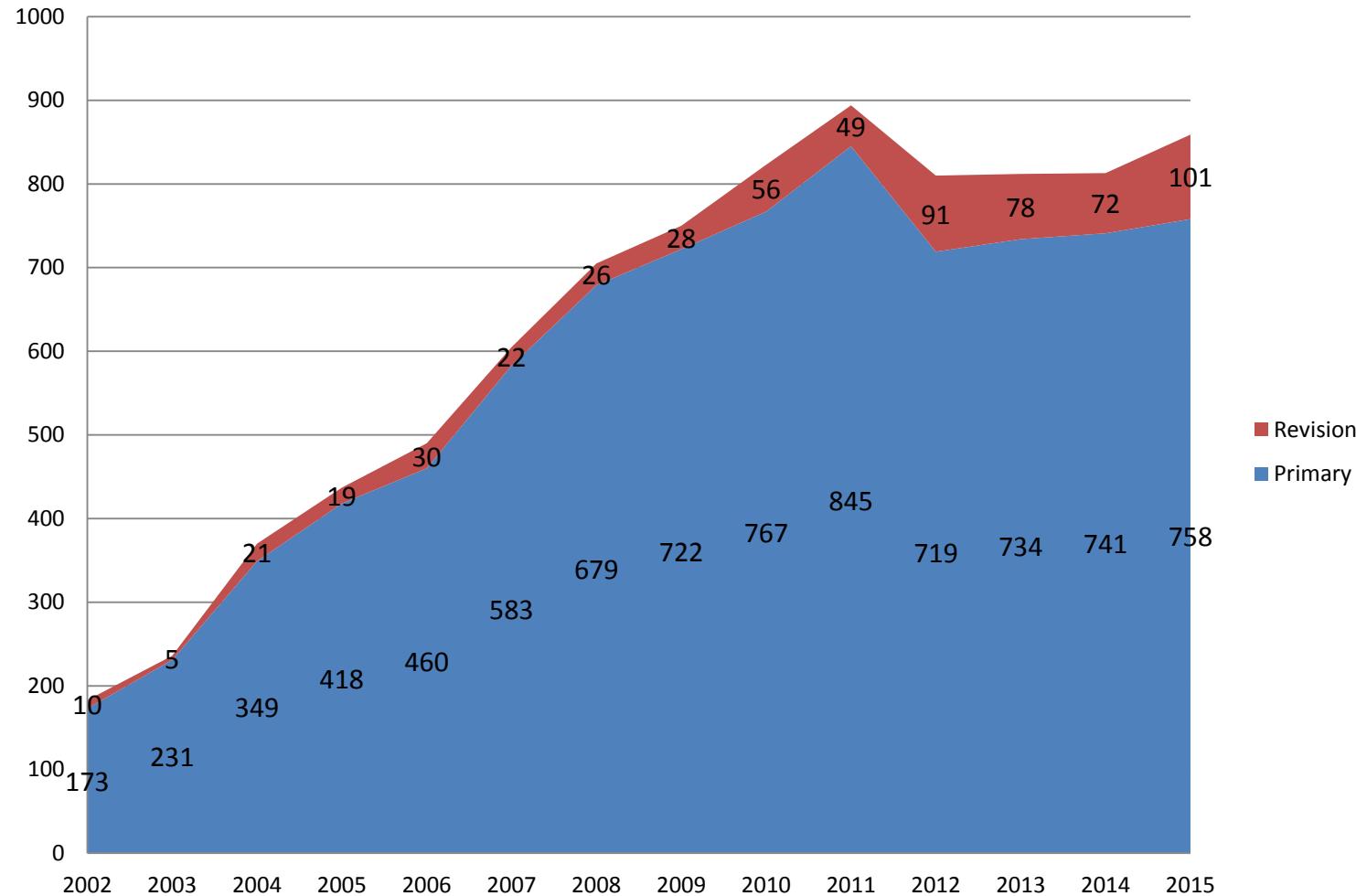
Primary Hip vs. Primary Knee Joint Replacement



Total and Partial Knee Joint Replacement

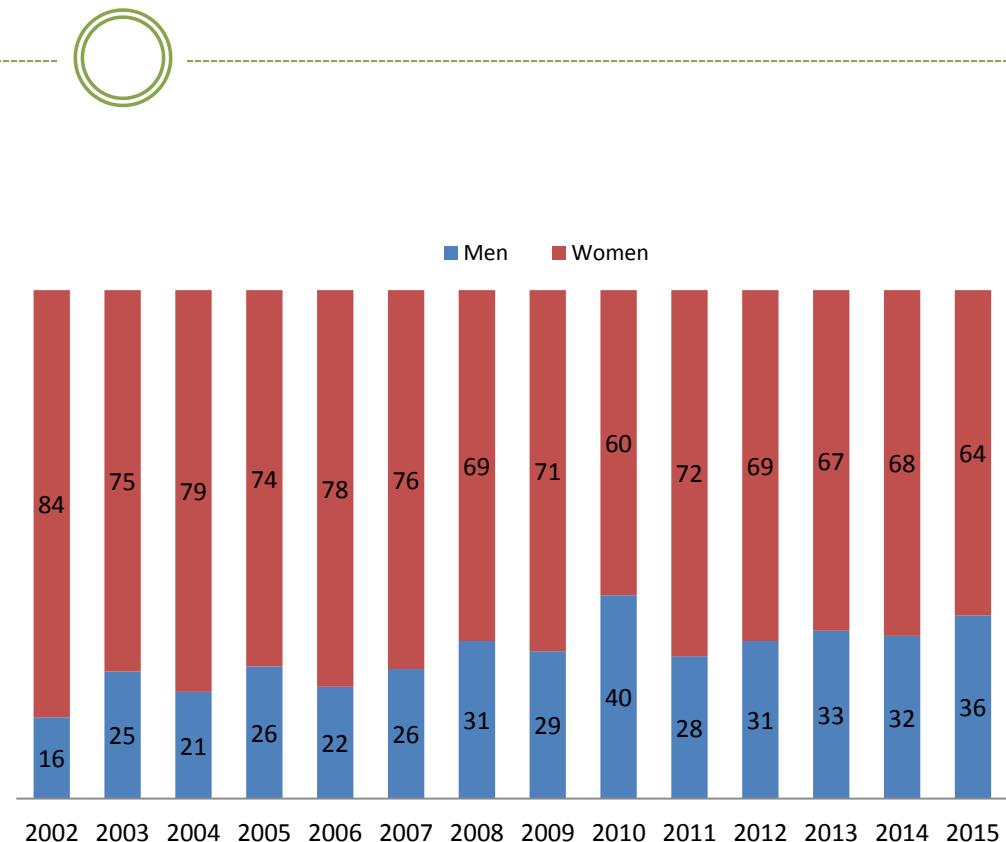


Primary vs. revision knee replacement

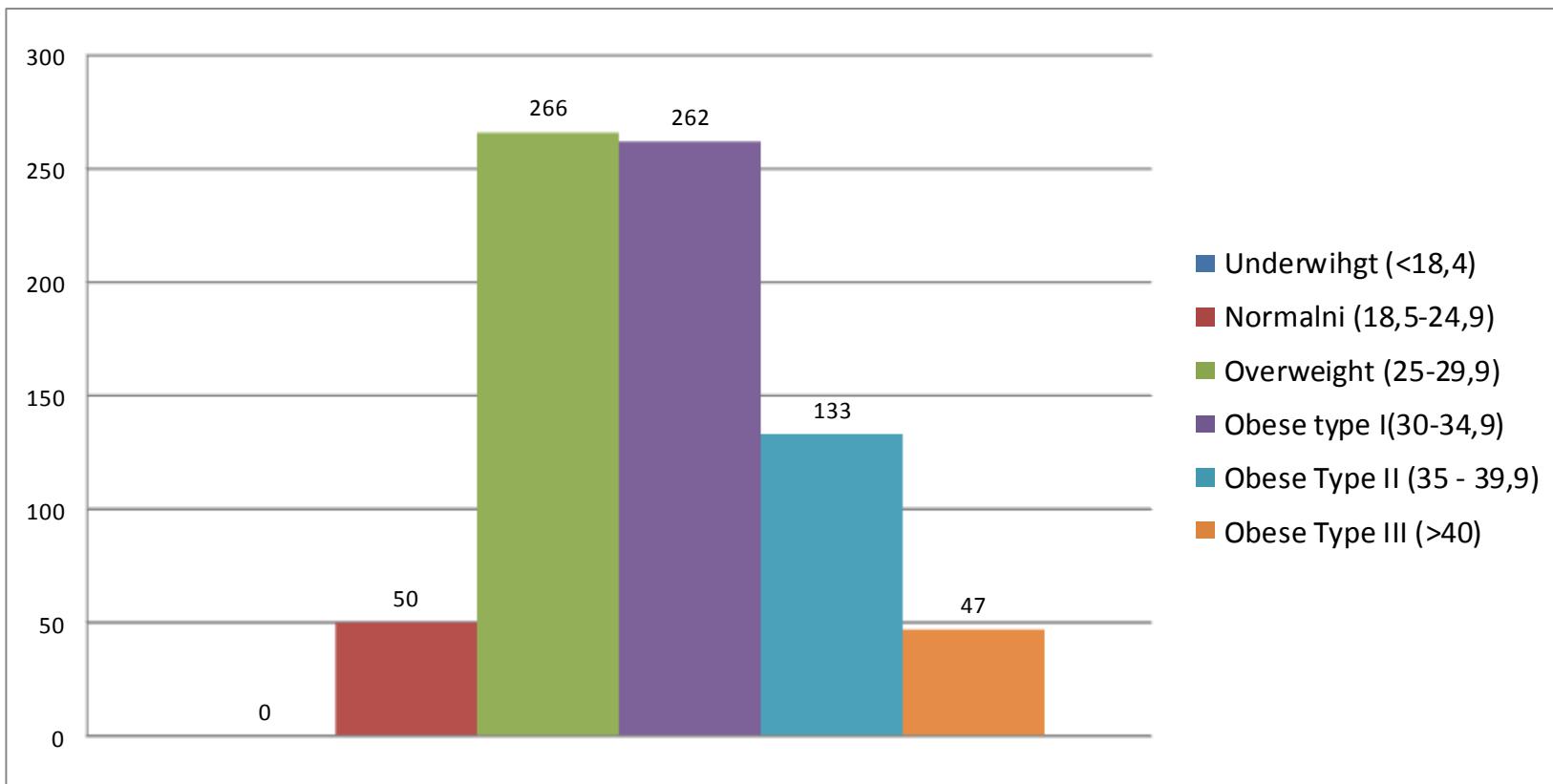


PATIENT DATA: AGE AND GENDER

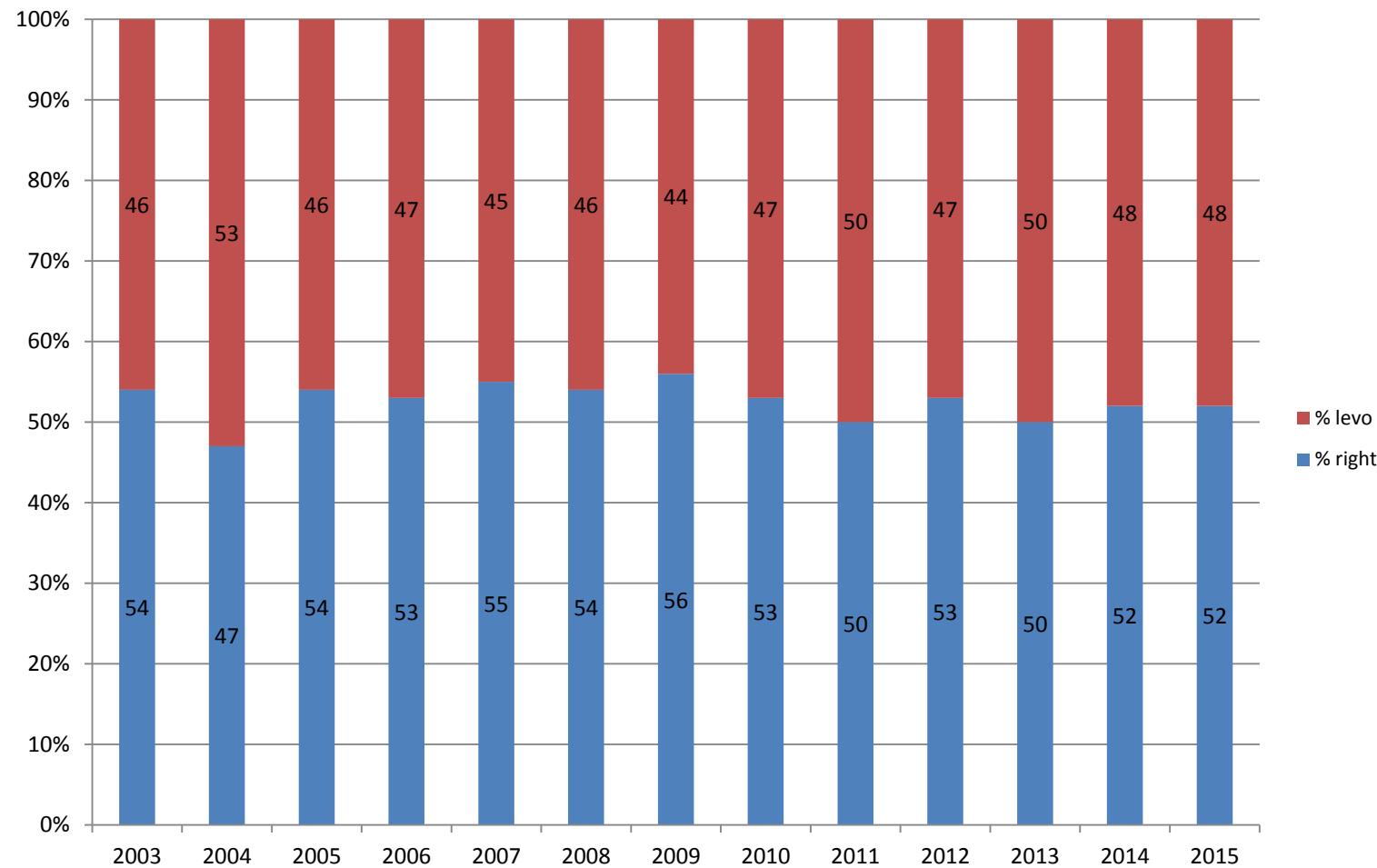
	Men	Women
2006	67 (40-80)	70 (43-84)
2007	69 (51-87)	71 (27-87)
2008	68 (40-85)	70 (32-87)
2009	68 (43-83)	71 (41-88)
2010	67 (33-86)	69 (40-87)
2011	67 (27-90)	70 (34-90)
2012	67 (41-82)	70 (48-89)
2013	67 (36-87)	70 (47-89)
2014	66 (30-87)	69 (41-89)
2015	67 (47-90)	70 (39-87)



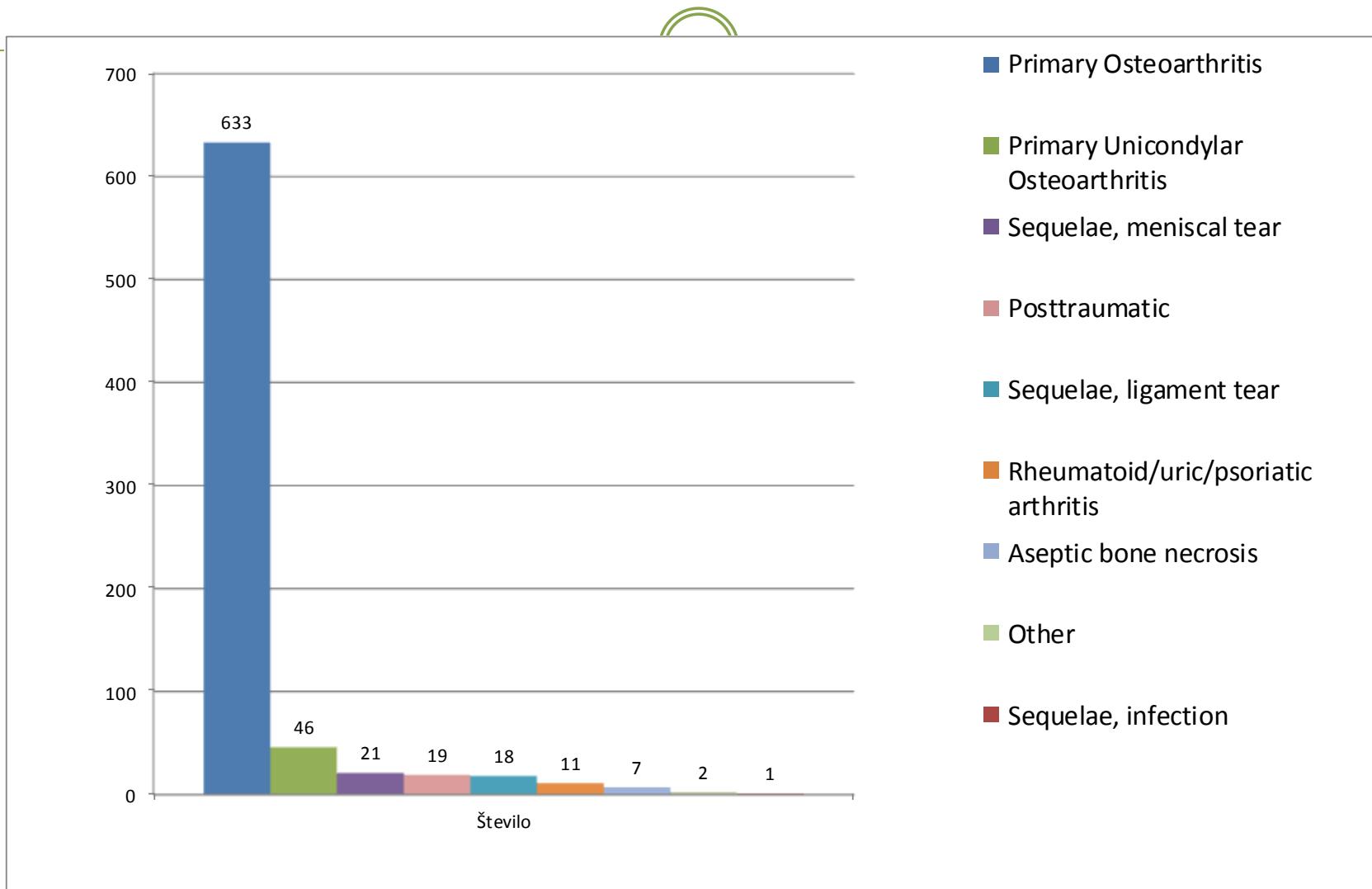
BMI of patients in 2015: average 31,7; min 18,7; max 54,3



Side of operated knee 2003 – 15

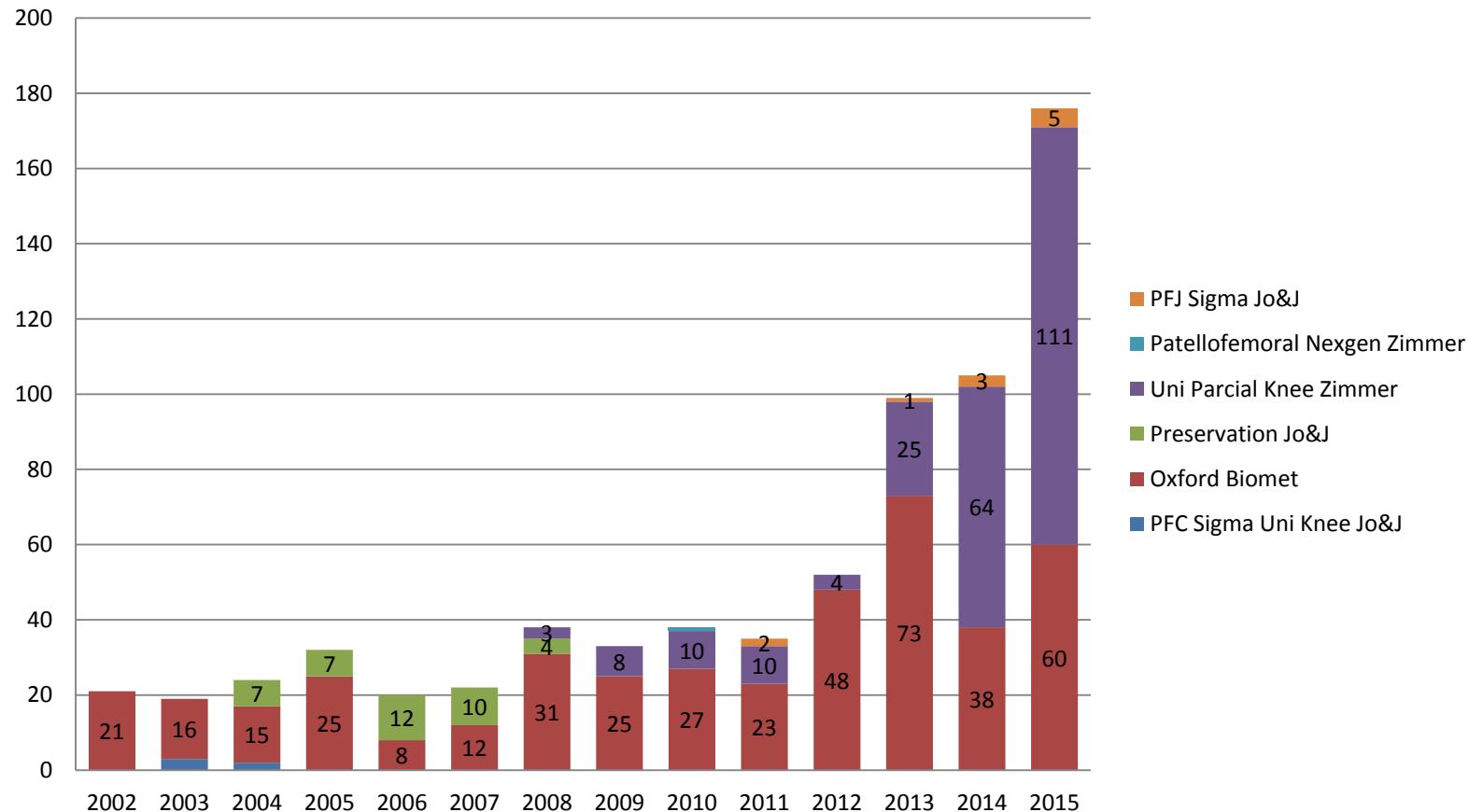


Preoperative diagnosis 2015

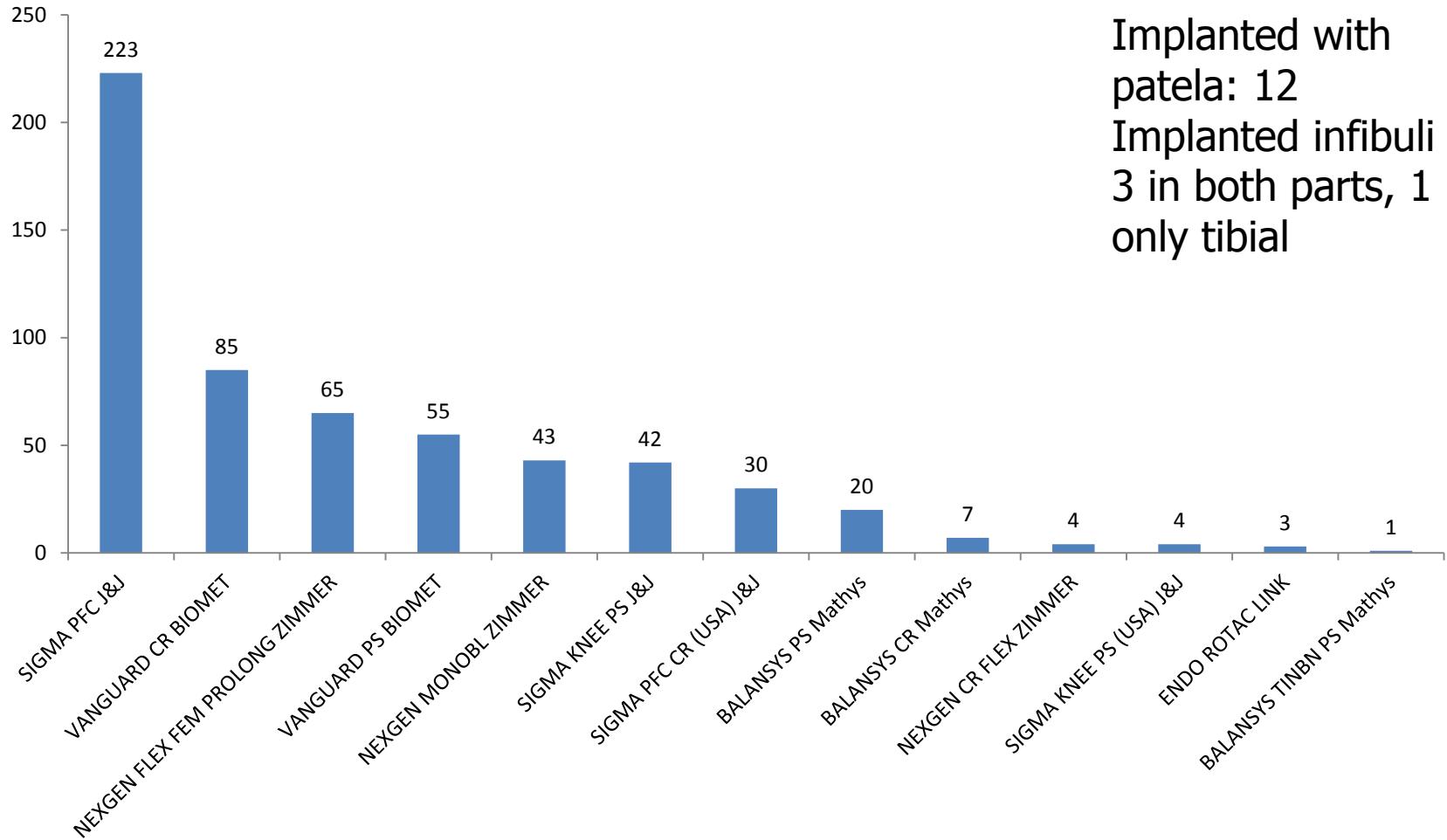


Unicondylar Knee Prostheses in 2015: sum 176

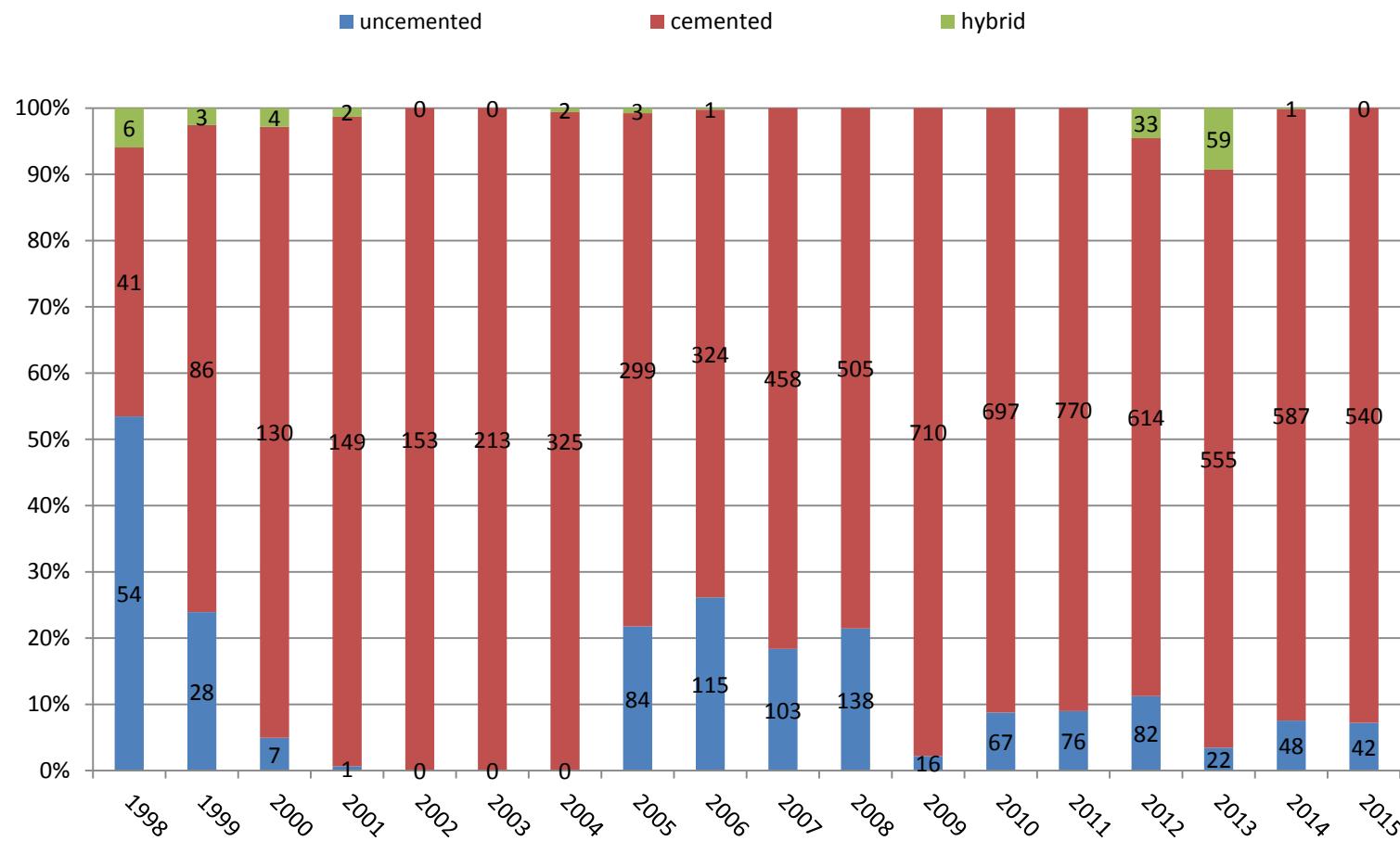
Parcialne kolenske proteze



Primary TKR in 2015, sum 582



Knee replacement by use of cement



Revision operations of Knee joint replacements

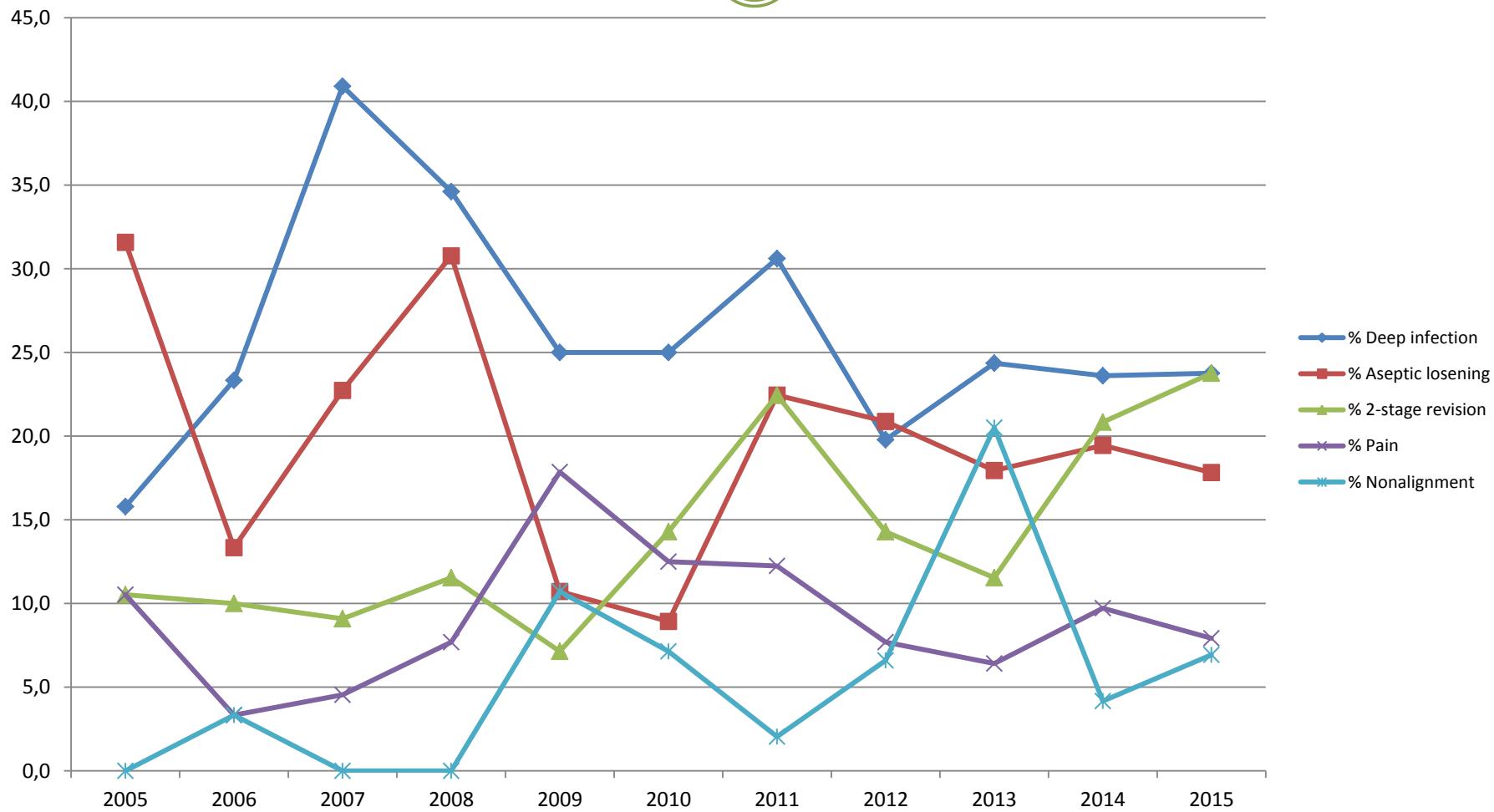


2015: 101 REVISIONS IN 87 PATIENTS

Reasons for revision Knee vs. Hips 2002-2015

Period 2002-2015	Knee (%)	Hips (%)
Deep infection	24,51	12,03
Aseptic loosening	18,91	59,45
Nonalignment, malposition	18,26	0,0
2-stage revision	15,63	6,45
Pain	8,55	2,01
OA of other compartment	5,92	0,00
Other (wear of PE, ...)	4,28	3,55
Dislocation	1,81	4,52
Periprosthetic fracture	1,32	7,12
Implant broken	0,82	2,72
Osteolysis	0,00	2,16

Reasons for revision TKR from 2002 to 2015 (%)



Revisions from other hospitals

Year	All revisions	Nº of revisions from other hospitals	%
2002	10	2	20 %
2003	5	1	20 %
2004	21	5	24 %
2005	19	2	11 %
2006	30	4	13 %
2007	22	2	9 %
2008	26	2	8 %
2009	28	2	7 %
2010	56	8	7 %
2011	49	6	12 %
2012	91	12	13 %
2013	77	17	22 %
2014	72	12	17 %
2015	86	15	15 %

Revision burden – all revisions

Year	RB (revision burden) = Nº of revisions*100/(Nº of primaries+ Nº of revisions) in %	Nº of revisions for infection*100 / (Nº of primaries+ Nº of revisions) in %
2002	5,46	1,09
2003	2,12	0,00
2004	5,68	0,81
2005	4,35	0,92
2006	6,12	1,22
2007	3,64	1,49
2008	3,69	1,28
2009	3,73	0,93
2010	6,80	1,46
2011	5,48	1,23
2012	11,23	1,98
2013	9,61	1,60
2014	8,91	1,86
2015	11,76	2,56
Average Valdoltra	6,33	1,32
Norway 16	8,21	1,08
NJR 16	5,85	1,78

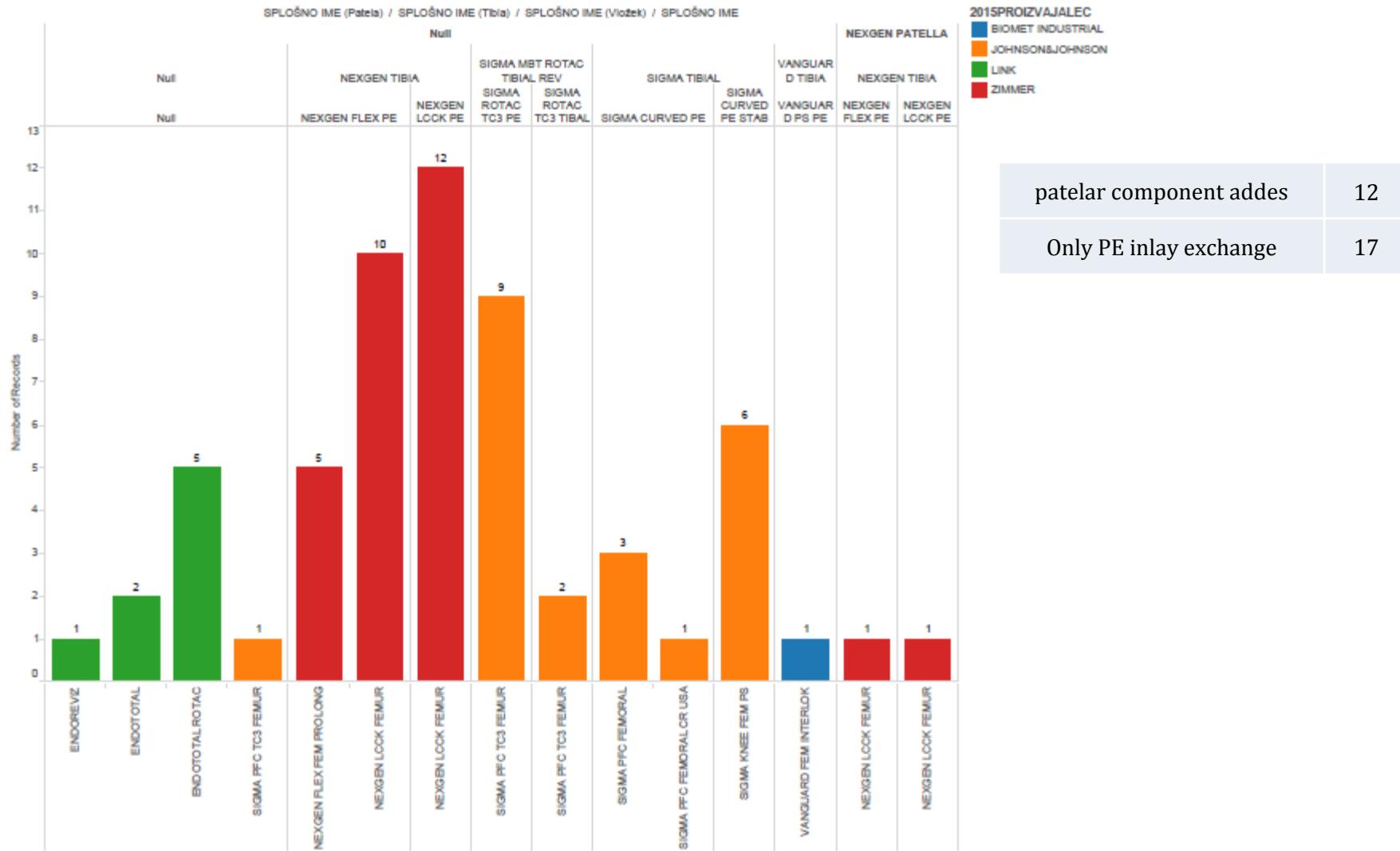
Revisions per 100 observed components years - knees

Year	Mean Follow up period (years)	Revision rate	Number primary cases	Number of all revisions	Number of first revisions in this FU period	Revision rate for revisions in this FU period	Observed component years	Revisions per 100 observed component years
2002	0,46	5,46	173	10	0	0,00	79,81	0,00
2003	0,88	3,58	404	15	0	0,00	354,16	0,00
2004	1,22	4,56	753	36	6	0,76	922,31	0,65
2005	1,60	4,49	1171	55	12	0,98	1873,54	0,64
2006	2,03	4,95	1631	85	21	1,22	3305,12	0,64
2007	2,36	4,61	2214	107	29	1,25	5216,43	0,56
2008	2,69	4,40	2893	133	39	1,29	7771,63	0,50
2009	3,05	4,26	3615	161	54	1,43	11015,85	0,49
2010	3,43	4,72	4382	217	82	1,78	15008,65	0,55
2011	3,79	4,84	5227	266	99	1,80	19818,78	0,50
2012	4,27	5,66	5946	357	136	2,16	25414,18	0,54
2013	4,75	6,11	6680	435	172	2,42	31728,17	0,54
2014	5,23	6,40	7416	507	208	2,63	38776,10	0,54
2015	5,69	6,92	8174	608	258	2,94	46528,03	0,55

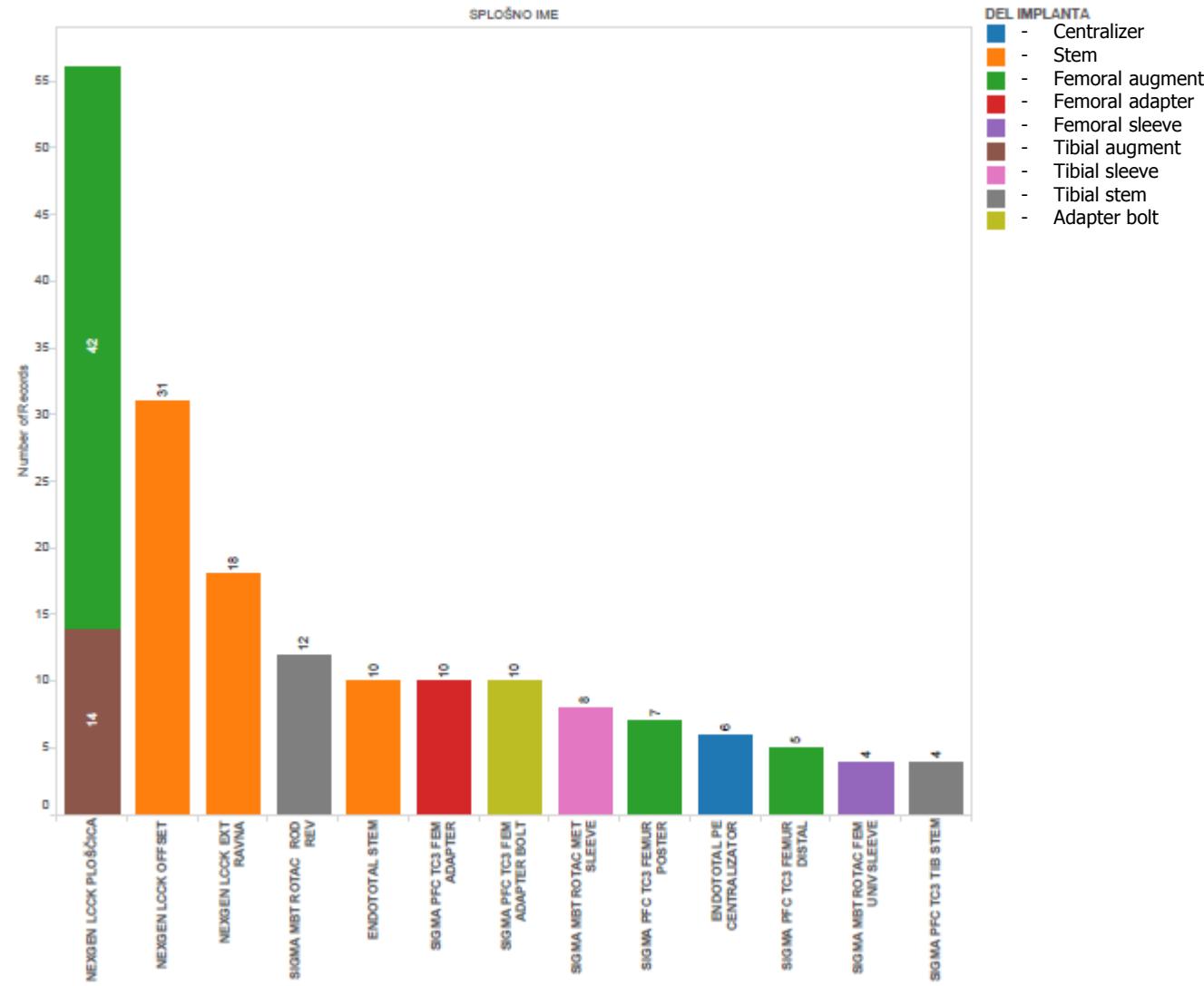
Revision rate for knee prostheses from 02 to 15

Name of implant	All implanted	Removed	% revisions
PFJ Sigma Jo&J	11	0	0,00
Sigma Knee Rotac. Hybrid Jo&J	92	0	0,00
Sigma Knee Jo&J	460	2	0,43
Uni Parcial NexGen Zimmer	235	2	0,85
Solution S&N	1152	24	2,08
Sigma PFC Jo&J	2043	43	2,10
Vanguard Biomet	416	9	2,16
Nexgen Monobloc Zimmer	801	18	2,25
Balansys Mathys	43	1	2,33
AGC Biomet	747	26	3,48
Nexgen Knee Zimmer	1179	54	4,58
Preservation Jo&J	40	2	5,00
Advance WRIGHT	300	16	5,33
Nexgen LCKK Zimmer	32	2	6,25
Oxford Biomet	422	32	7,58
Endomodel LINK	50	4	8,00
Genesis S&N	33	3	9,09

Revision TKR components in 2015



Added stems, sleeves, augments and adapters in revisions in 2015



Removed components in 2015 (N° 61)

Oxford Biomet, 12,5 years



Nexgen Legacy, 13 years



IB Cremascoli, 17,4 years



Acknowledgments to:



- the director of Valdoltra Orthopaedic Hospital
Radoslav Marčan, dr. med., spec. ortop.
- all the orthopaedic surgeons, who perform knee arthroplasty in Valdoltra Hospital
- all other medical and administrative stuff, who are involved in the process of registration in Valdoltra Arthroplasty Registry

