

VALDOLTRA HIP ARTHROPLASTY REGISTRY REPORT 2002-2019



Valdoltra
Arthroplasty Registry

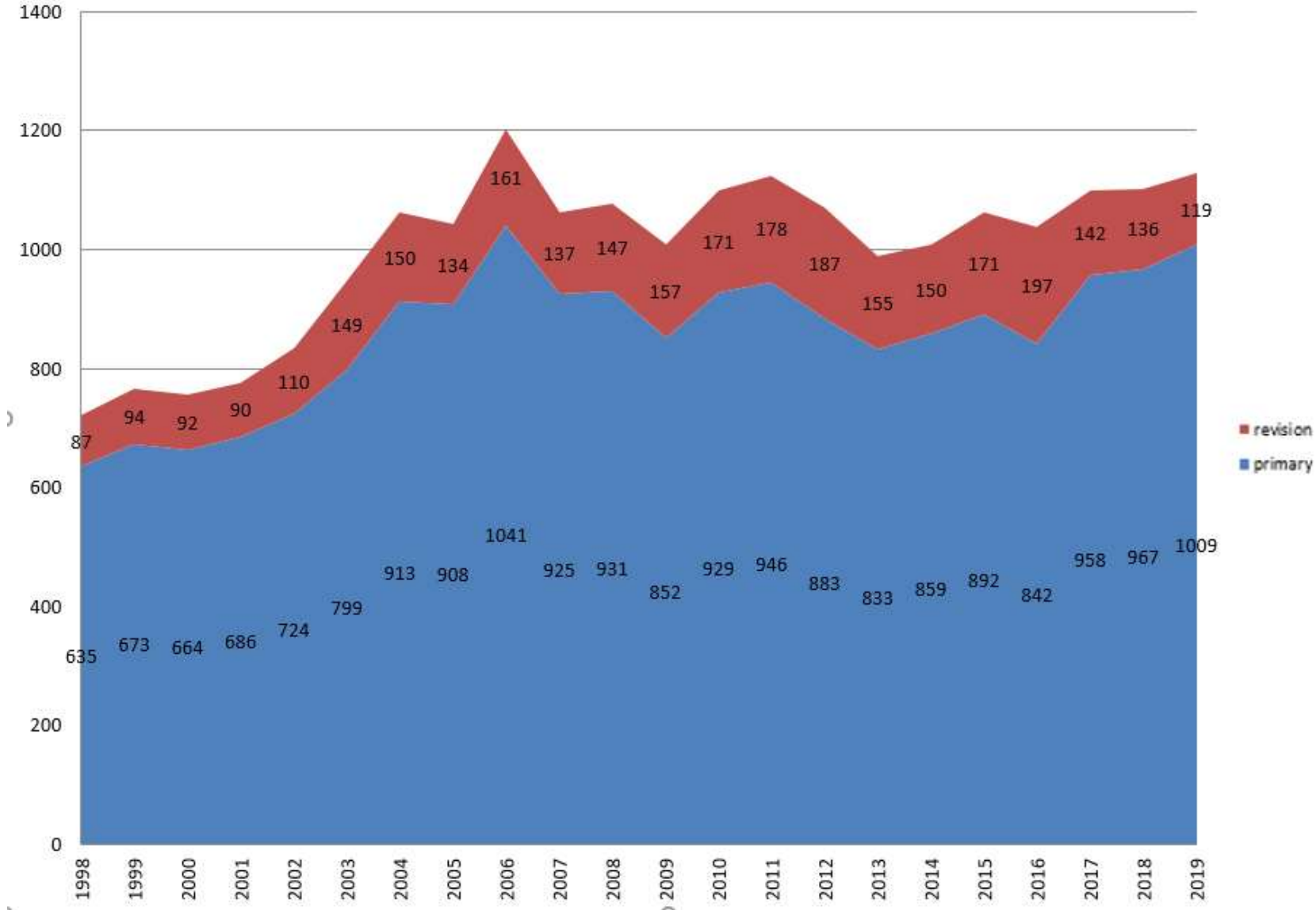
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July 2020

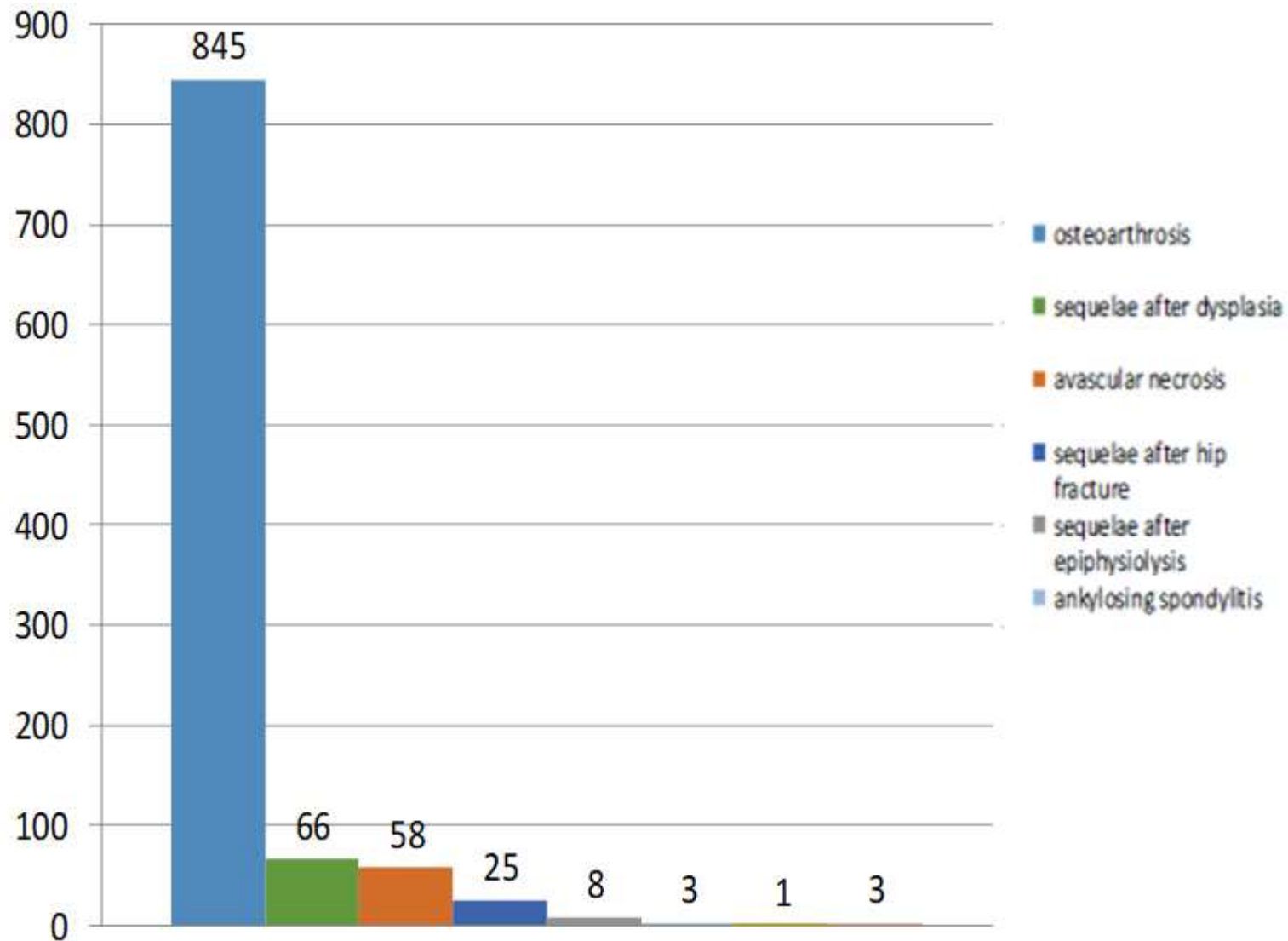
Primary and revision THR by year



Patient data for primary THR 2019

- Men – Women = 44% to 56%
- Average age = 64 y men and 68 y women
- Right - left = 56% to 44%
- Average preoperative Harris Hip Score = 60 ± 16 pts
- 80 % overweight and obese ($BMI \geq 25$)
- Approach: 50 % direct lateral, 42 % anterior and 8 % anterolateral
- Average duration of operation 63 ± 21 min
- Systemic antibiotic prophylaxis at all operation

PREOPERATIVE DIAGNOSIS FOR PRIMARY THR IN 2019

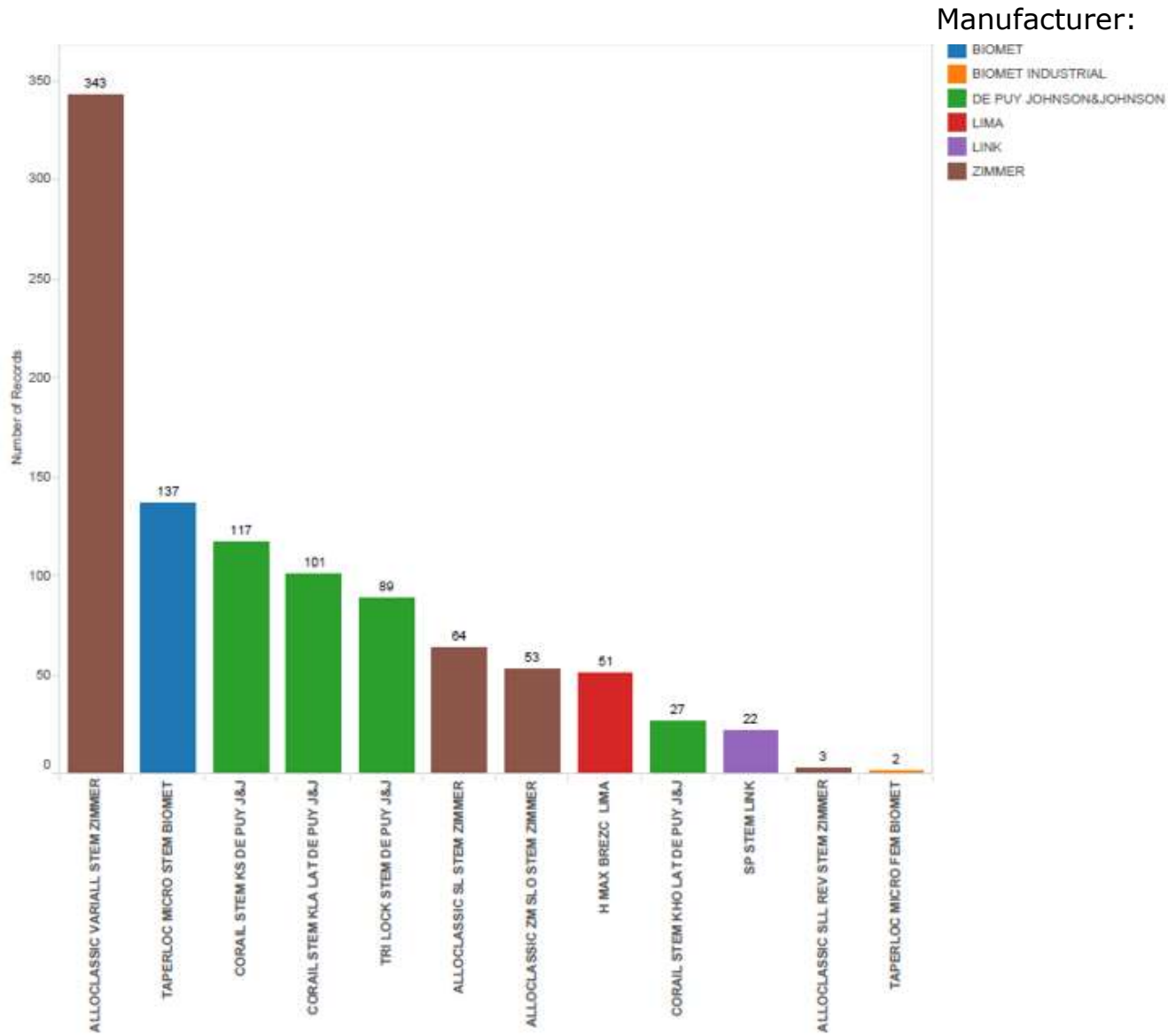




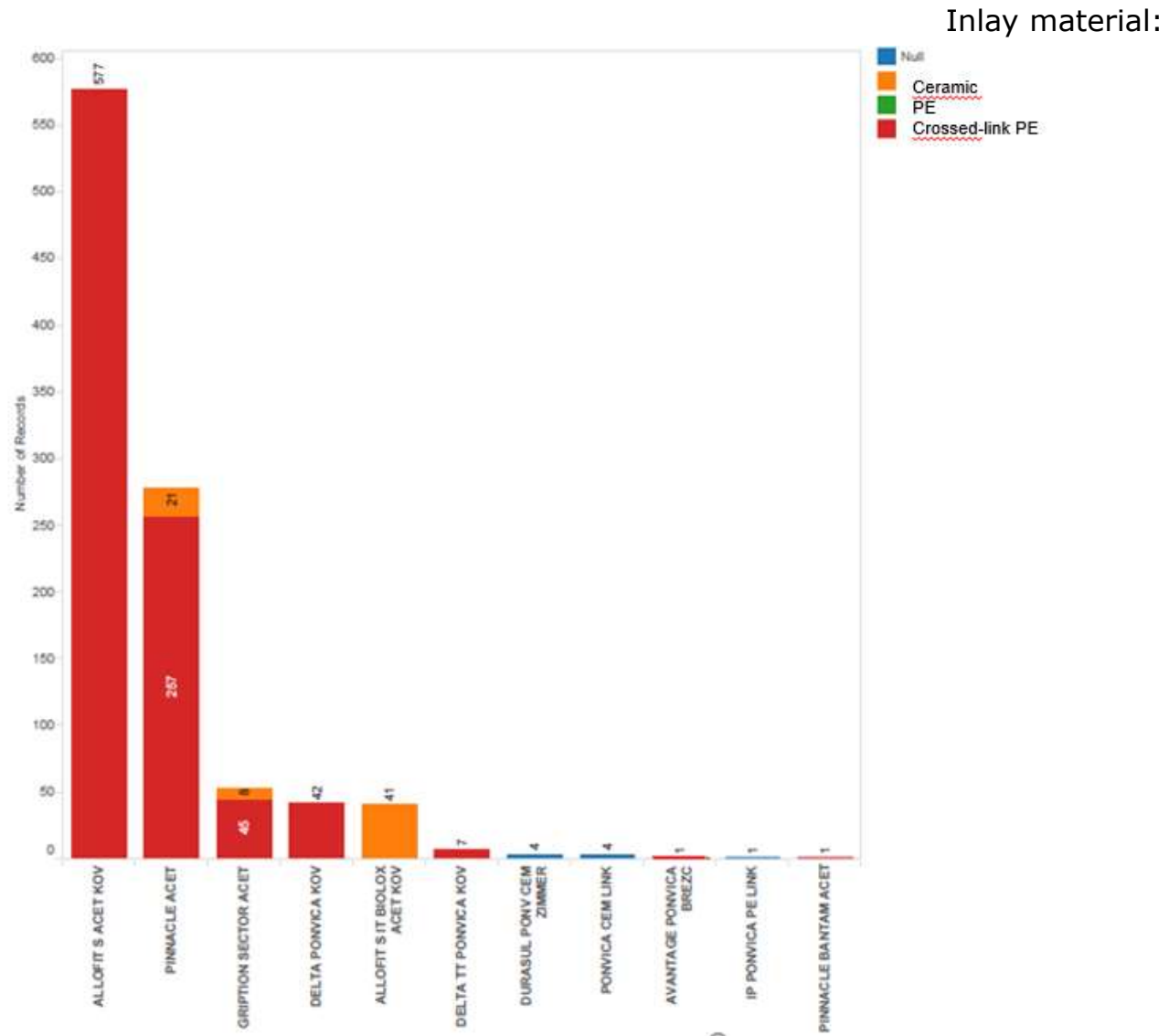
PRIMARY THRS 2019

5
Implanted material

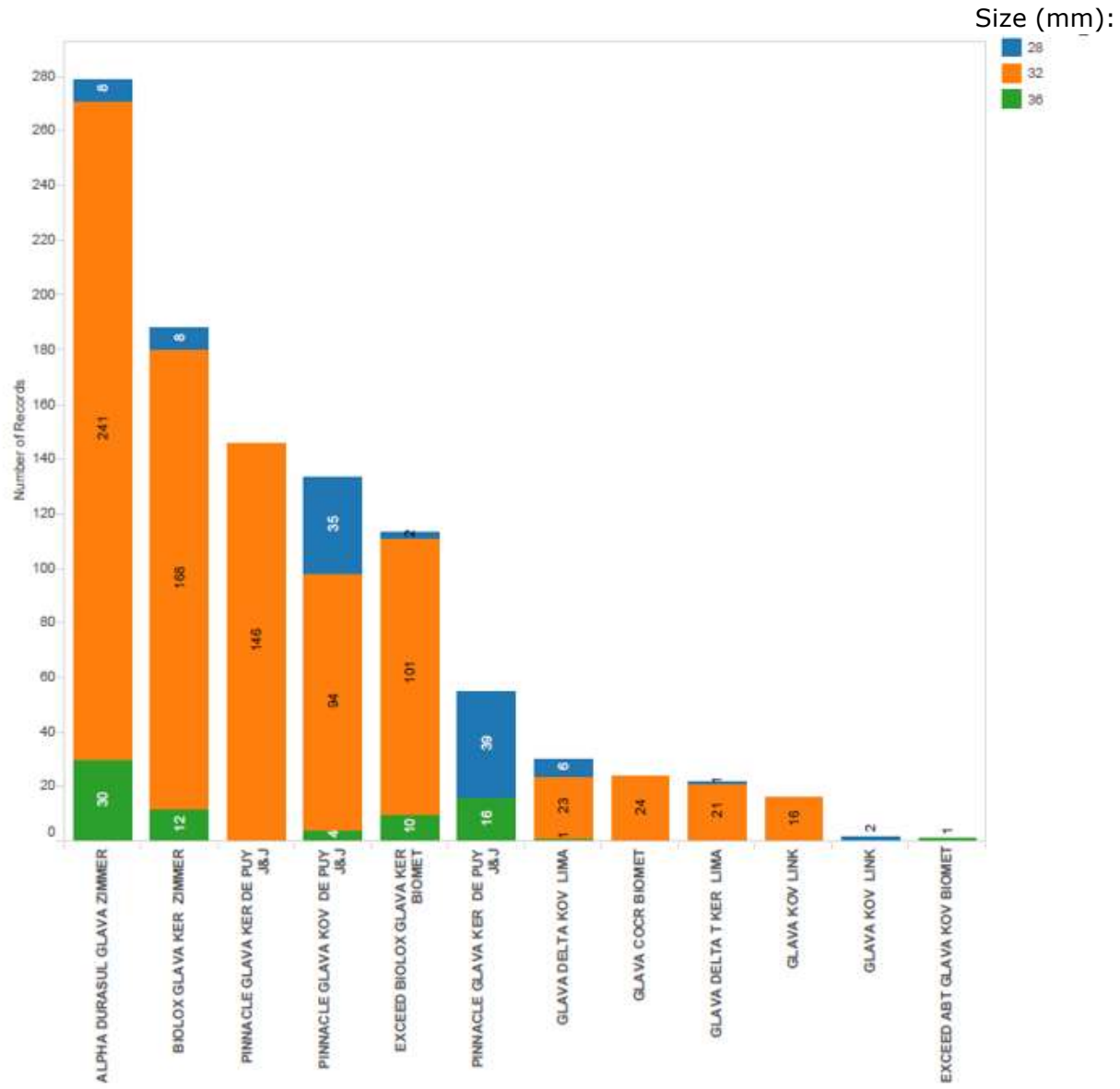
PRIMARY STEMS in 2019, sum 1009



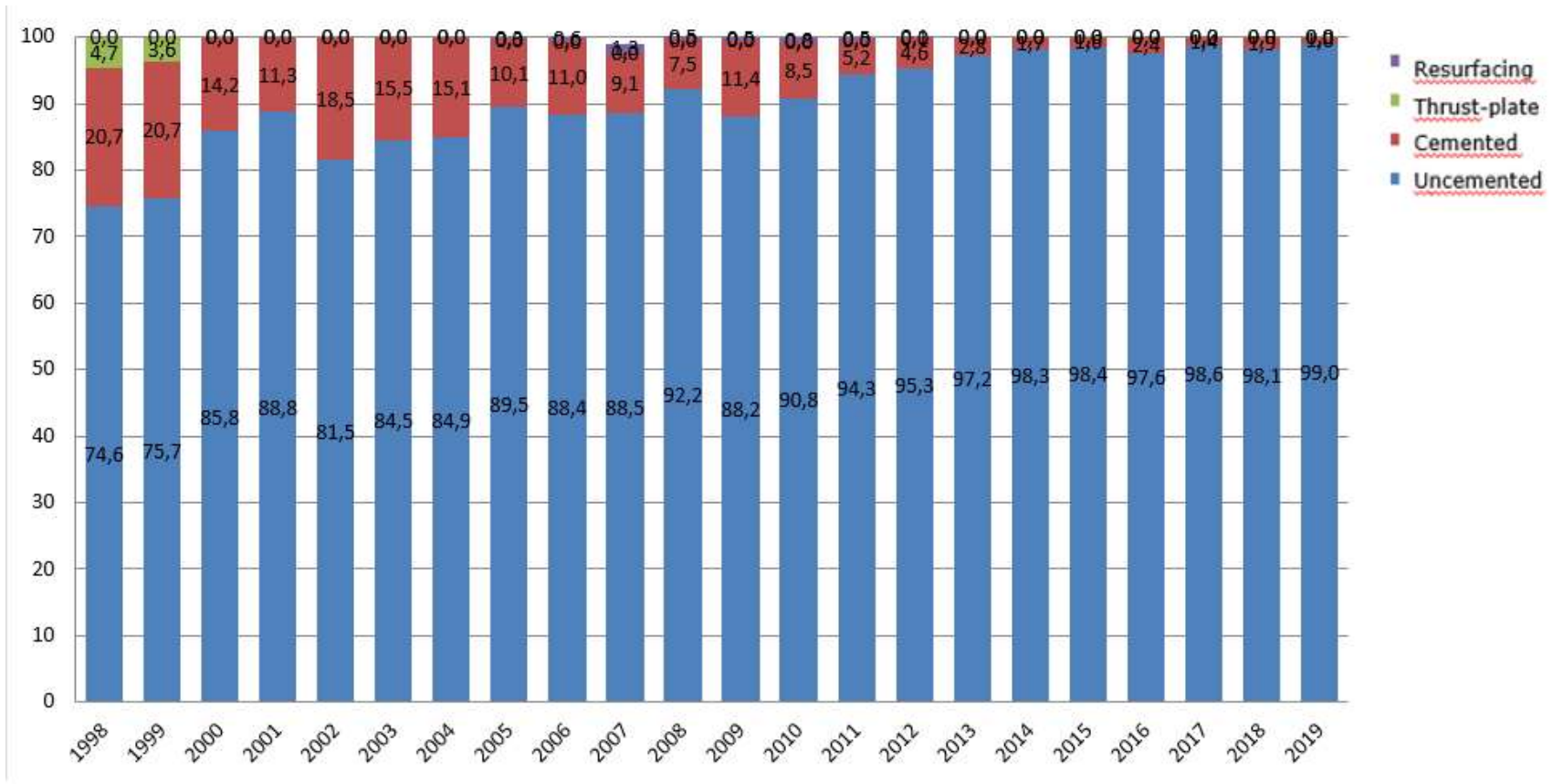
PRIMARY ACETABULAR COMPONENTS IN 2019, SUM 1009



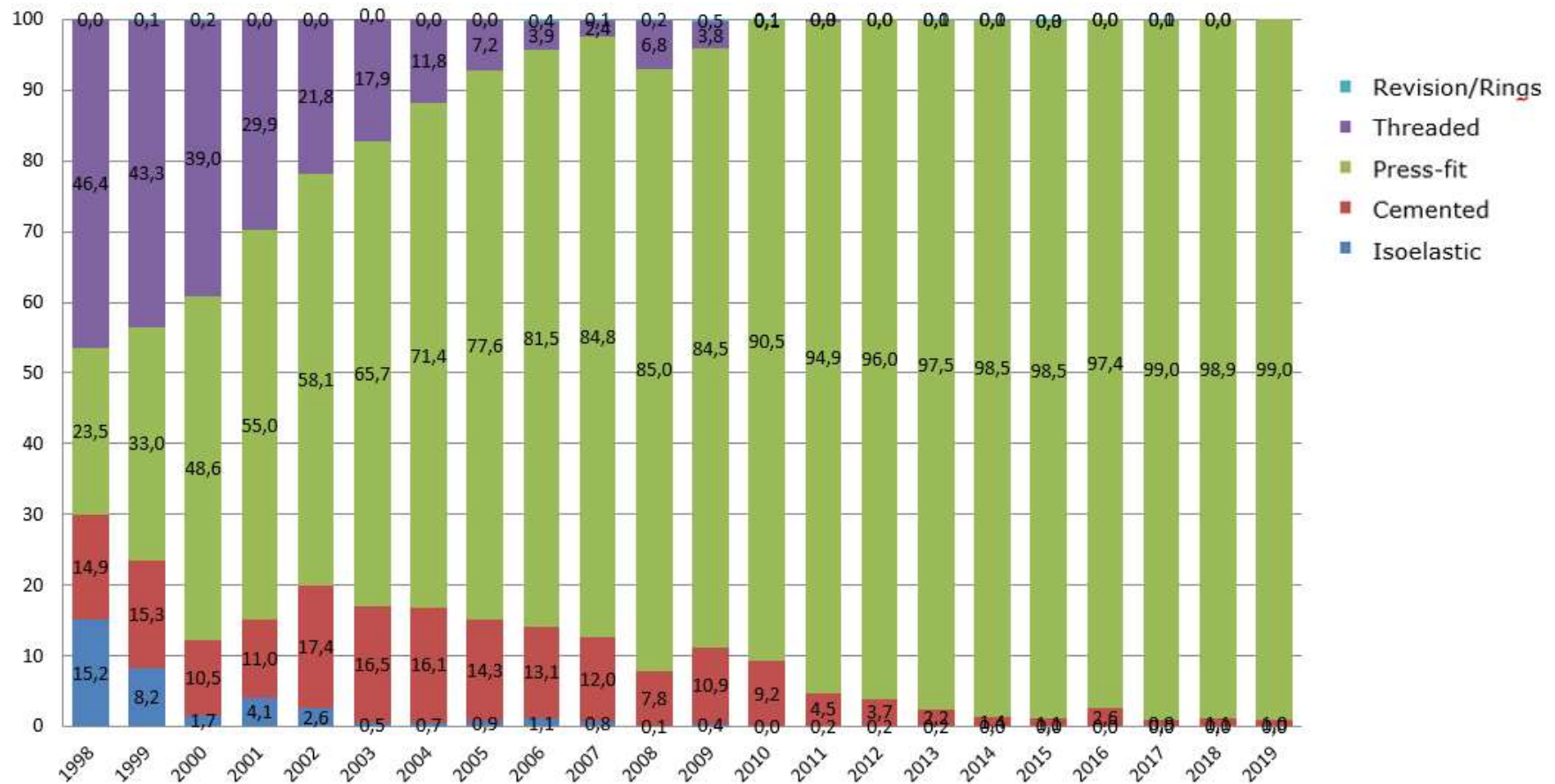
PRIMARY HEADS in 2019, sum 1009



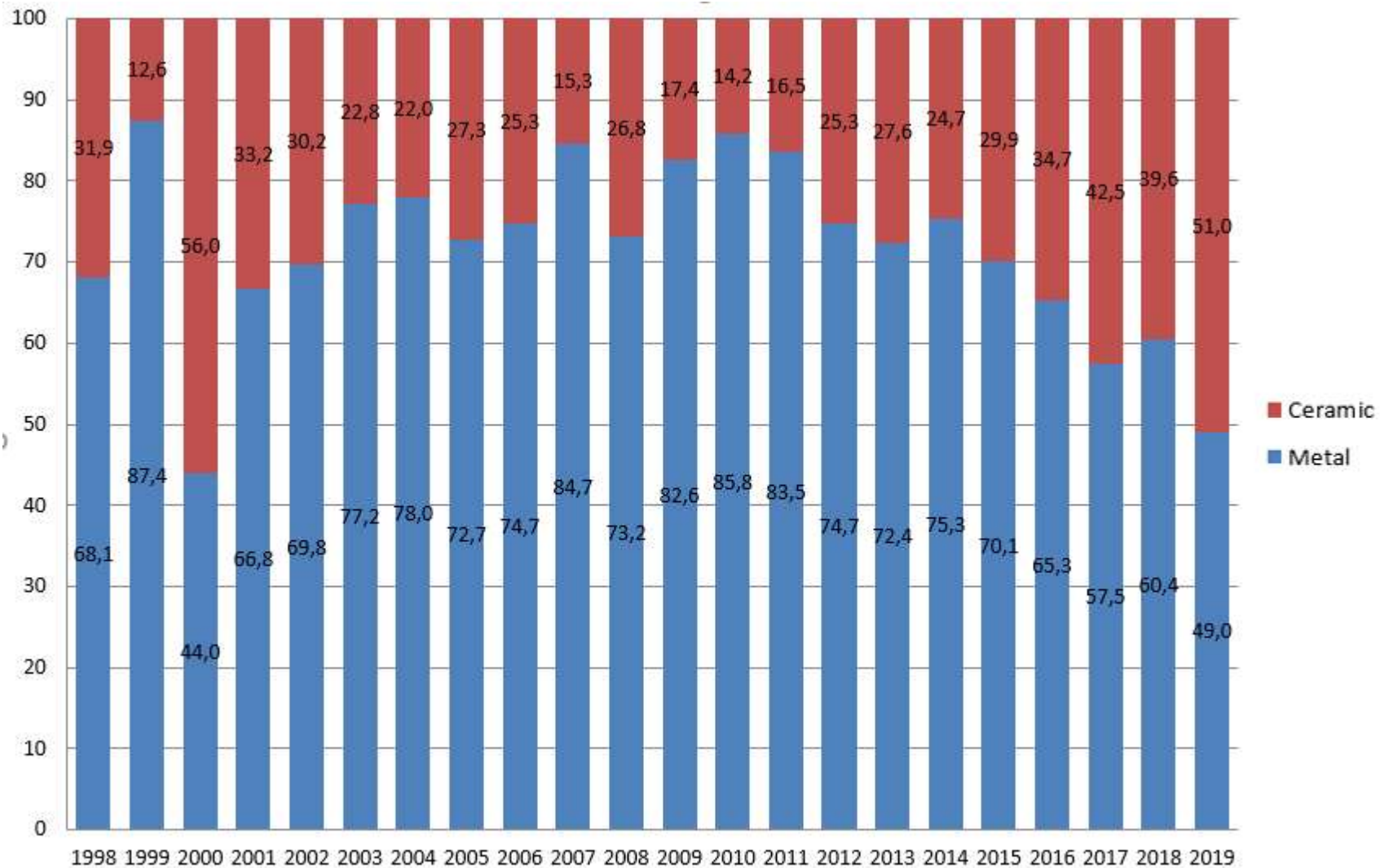
Cemented, uncemented stems, trust-plate and resurfacing prostheses 1998 - 2019



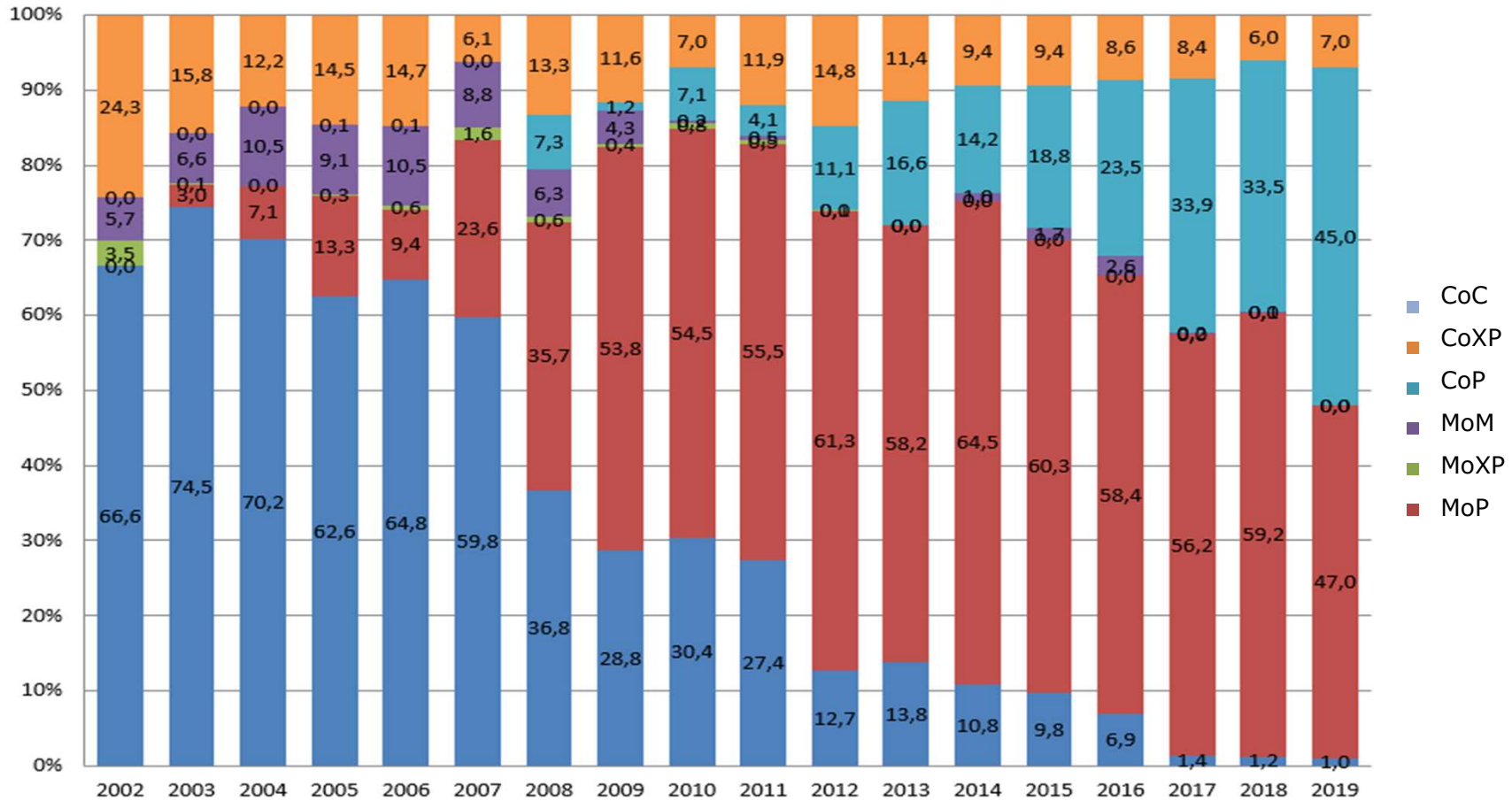
Primary cups by fixation 1998 - 2019



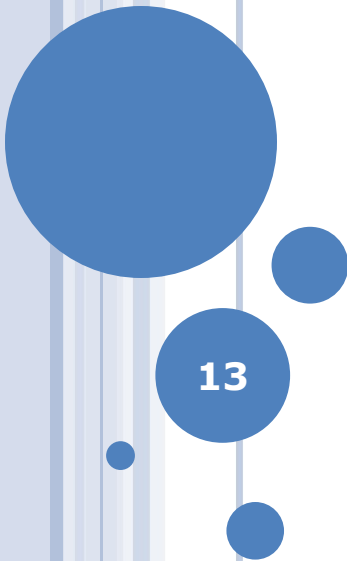
Percentage of metal and ceramic heads 1998 - 2019



BEARING SURFACE 2002 - 2019



REVISION OPERATIONS IN 2019



119 revision THRs at **113** patients

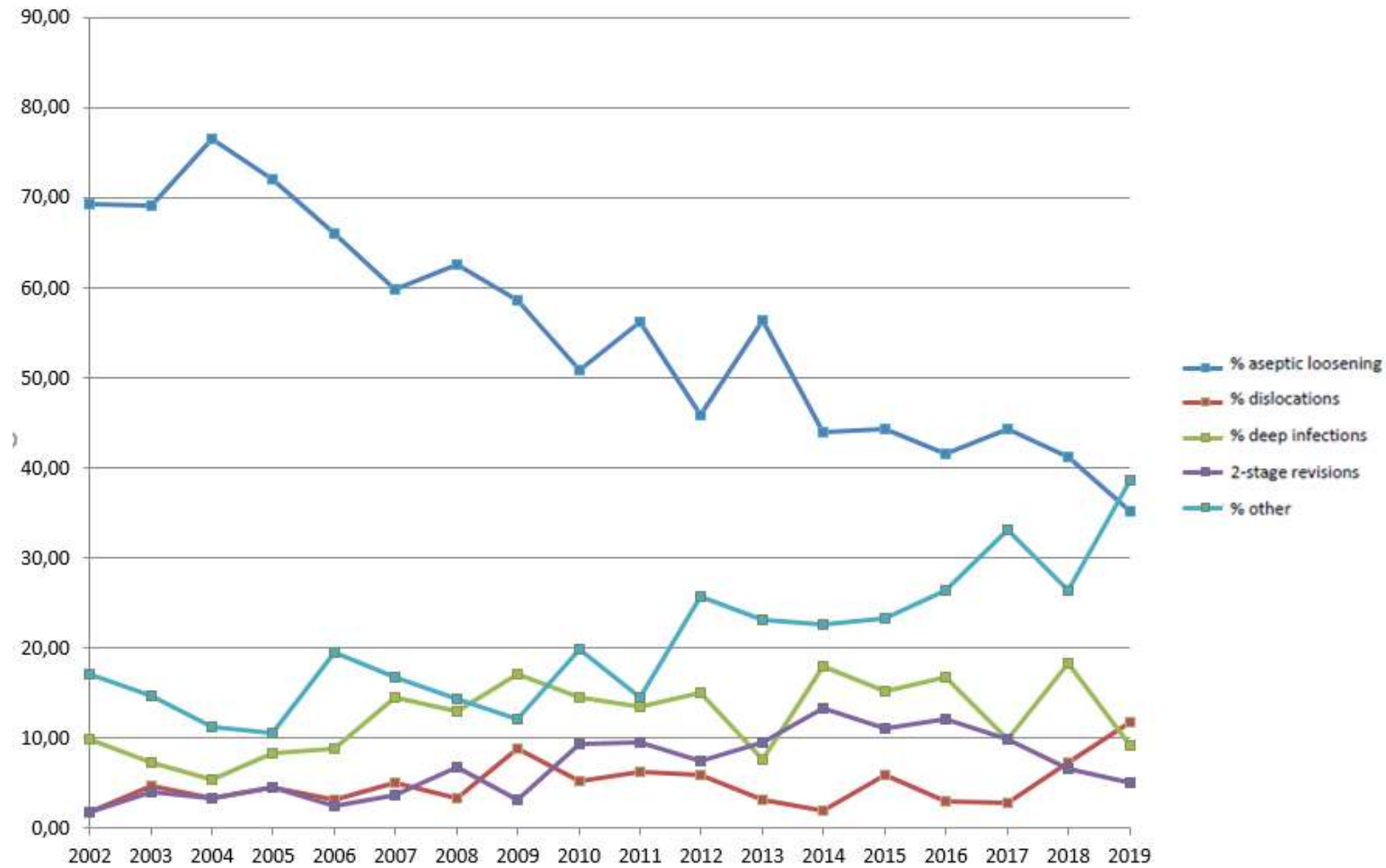
PATIENT DATA FOR REVISIONS 2018

- Men – Women = 40% to 60%
- Average age = 70 y men and 74 y women
- Right - left = 50% to 50%
- Average preoperative Harris Hip Score = 56 ± 16 pts
- 83 % overweight or obese ($BMI \geq 25$)
- Approach in 84 % direct lateral
- Average duration of operation 126 ± 42 min

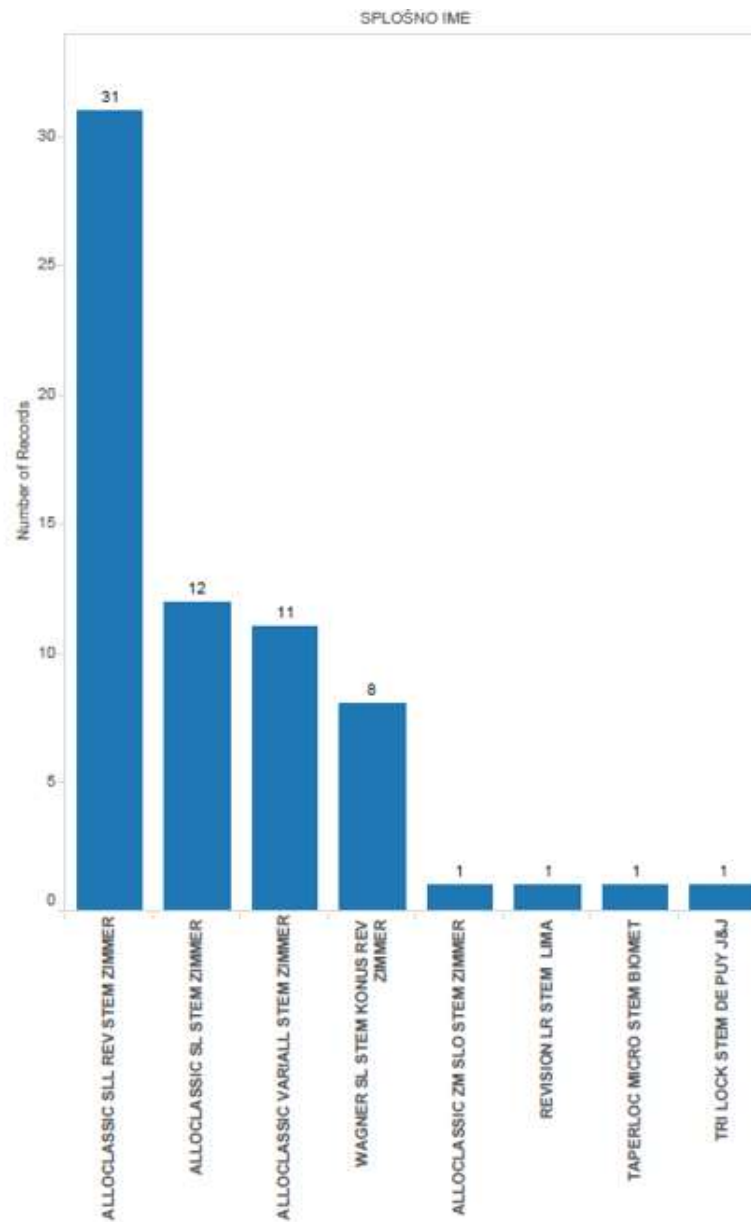
Reasons for revisions hips vs. knees 2002 - 2018

period 2002-2018	Hips (%)	Knees (%)
Aseptic loosening	55,3	20,2
Deep infection	12,6	24,2
Periprosthetic fracture	7,7	2,5
2-stage revision	6,9	13,2
Other	5,2	6,9
Dislocation	4,9	1,5
Implant broken	2,9	0,9
Osteolysis	2,5	0,00
Pain	2,3	8,5
Instability, nonalignment, poor ROM	0,00	14,4
OA od other compartment	0,00	7,6

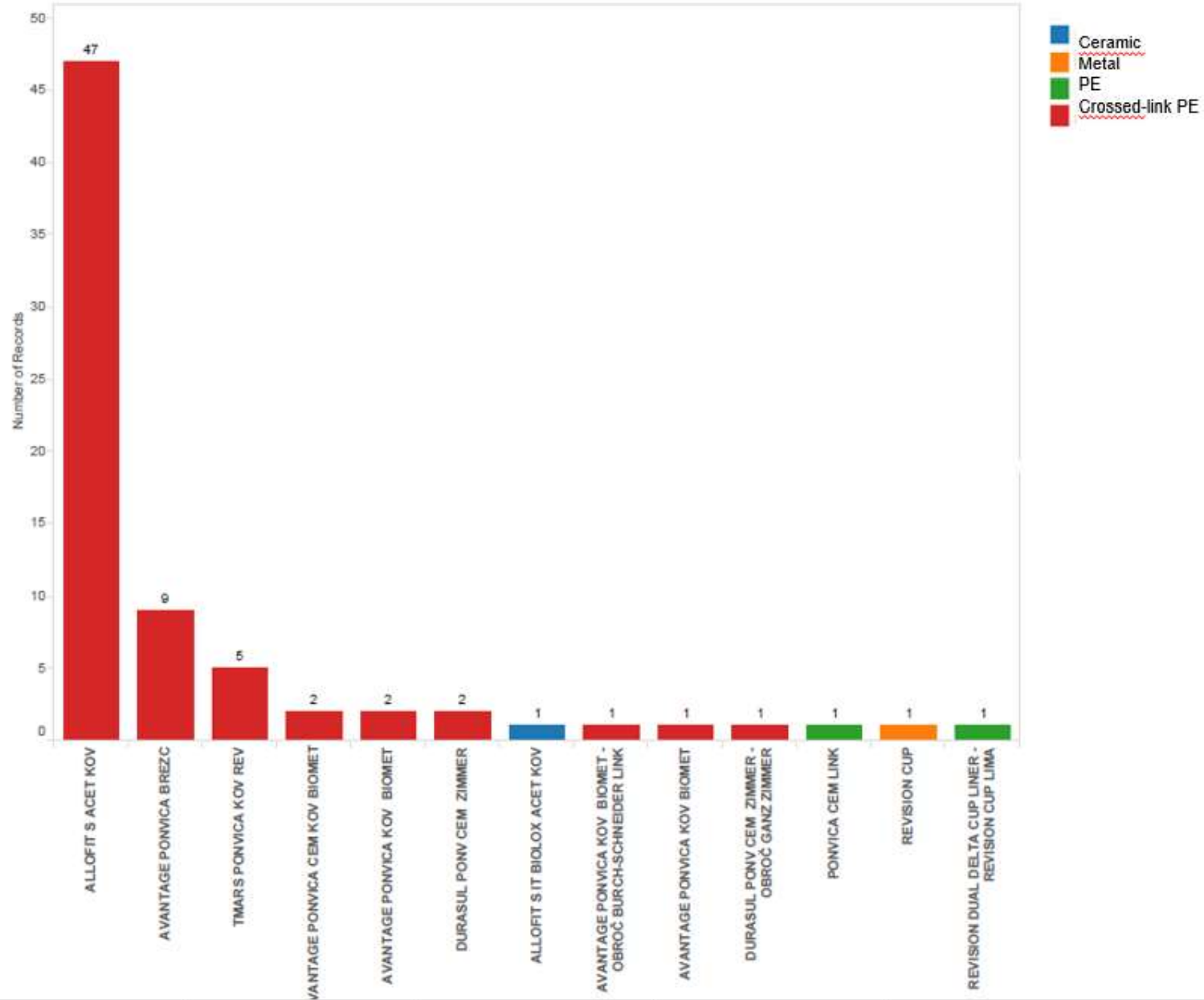
Reasons for revision THRs from 2002 to 2019



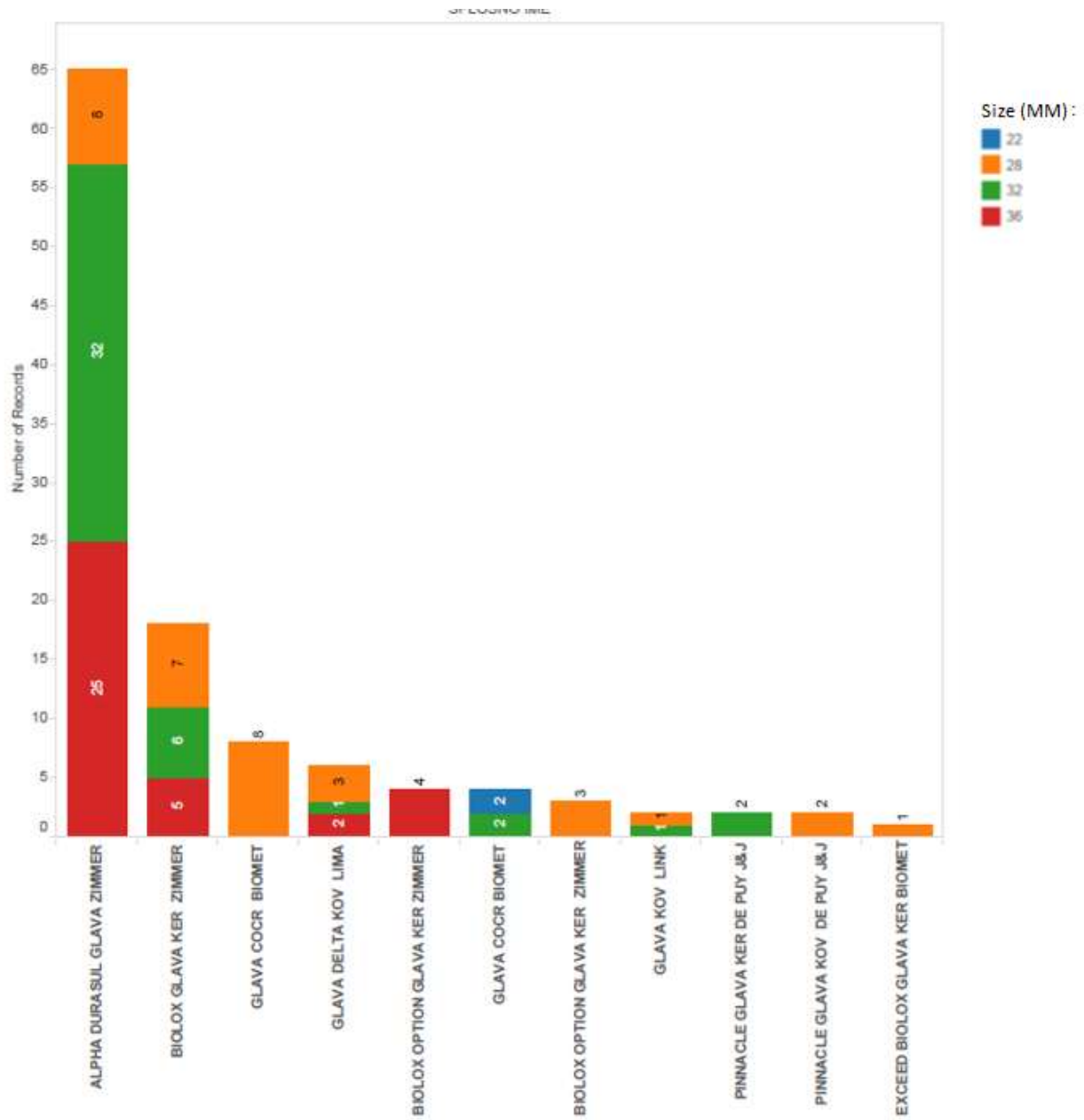
Stems, used in revisions 2019, sum 66



Cups. used at revisions 2019. sum 74



Heads, used at revisions in 2019, sum 115



REVISION BURDEN FOR VALDOLTRA 2002 - 2019

Year	RB (revision burden) = N ^o of revisions*100/(N ^o of primaries+ N ^o of revisions) in %	N ^o of revisions for infection*100 / (N ^o of primaries+ N ^o of revisions) in %
2002	10,91	1,20
2003	12,66	0,63
2004	11,48	0,66
2005	11,14	0,67
2006	11,75	1,17
2007	11,68	1,79
2008	11,60	1,21
2009	13,59	1,79
2010	12,91	1,55
2011	13,17	1,51
2012	13,74	2,15
2013	13,06	1,01
2014	12,00	2,08
2015	12,98	1,98
2016	15,21	2,60
2017	10,09	0,91
2018	12,33	1,72
2019	8,42	0,98
Average OBV	12,02 %	1,42 %
Australia AONJRR 17	10,99 %	2,00 %
Sweden SHAR 16	7,25 %	1,86 %

REVISIONS PER 100 OBSERVED COMPONENT YEARS - HIPS

Year	Mean FU (years)	Revision rate	Number of primary	N° of all revisions	N° of first revisions in this FU	Revision rate in FU period	Observed components years	Revisions per 100 observed component years
2002	0,53	12,45	724	103	6	0,73	384	1,56
2003	0,97	14,20	1523	252	14	0,79	1482	0,94
2004	1,41	14,16	2436	402	24	0,85	3428	0,70
2005	1,88	13,79	3344	535	30	0,77	6302	0,48
2006	2,31	13,66	4385	694	49	0,96	10140	0,48
2007	2,82	13,53	5310	831	75	1,22	14970	0,50
2008	3,32	13,55	6241	978	103	1,43	20749	0,50
2009	3,86	13,79	7093	1135	147	1,79	27410	0,54
2010	4,36	14,00	8022	1306	192	2,06	34961	0,55
2011	4,84	14,20	8968	1484	247	2,36	43442	0,57
2012	5,37	14,50	9851	1671	305	2,65	52888	0,58
2013	5,91	14,60	10684	1826	348	2,78	63182	0,55
2014	6,43	14,62	11543	1976	400	2,96	74250	0,54
2015	6,93	14,73	12424	2147	454	3,12	86136	0,53
2016	7,46	15,07	13266	2354	511	3,27	99009	0,52
2017	7,93	14,92	14235	2496	567	3,39	112845	0,50
2018	8,39	14,77	15190	2632	620	3,48	127451	0,49
2019	8,84	14,51	16211	2751	668	3,52	143245	0,47

Name	All primaries 02-18	All removed 02-18	% revisions
cem Conserve Wright	44	0	0,0
cem H-MAX stem Lima	7	0	0,0
cem Muller Merete Medical	7	0	0,0
cem SP Lubinus Link	737	5	0,7
Trilock stem DePuy JJ	228	1	0,4
Corail DePuy Jo&J	1856	14	0,8
Taperloc Biomet	377	3	0,8
H-MAX S Lima	298	3	1,0
Alloclassic (Variall) stem Zimmer	5013	54	1,1
Fiber Metal Zimmer	69	1	1,4
Fitmore Zimmer	249	5	2,0
cem Basis SL Smith&Nephew	44	1	2,3
AHS Cremascoli	86	2	2,3
Elite Plus JJ	76	2	2,6
Exception stem Biomet	166	5	3,0
Versys Zimmer	1016	34	3,3
C2 LIMA	279	10	3,6
ZM Endoplus (S&N)	2679	115	4,3
cem Metabloc Zimmer	24	1	4,2
Pipino FP LINK	69	3	4,3
CBH stem Mathys	362	16	4,4
Profemur Z Cremascoli	1107	65	5,9
rebrasta LINK	135	7	5,2
Anca Cremascoli	16	1	6,3
Copf (Chendo+Unior)	128	8	6,3
cem ATL Unior	17	2	11,8
Quadra stem Medacta	15	3	20,0

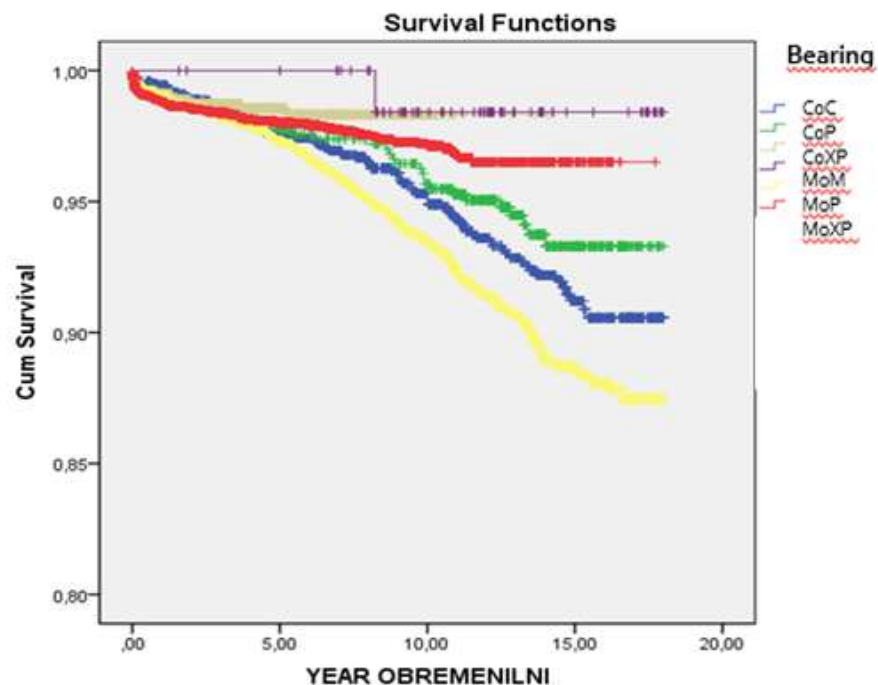
Revision rate for femoral stems from 2002 to 2019

Name	All primaries 02-18	All removed 02-18	% revisions
preplastitvena Conserve Wright	47	0	0,0
press fit G7 Biomet	57	0	0,0
press fit Gription DePuy JJ	152	0	0,0
press fit Selexys Mathys	129	0	0,0
press fit Pinnacle DePuyJJ	1690	2	0,1
cem IP Link	347	2	0,6
press fit Exceed ABT Biomet	157	1	0,6
press fit Allofit Zimmer	7143	59	0,8
press fit Delta Lima	577	7	1,2
press fit Procoty Wright	149	2	1,3
press fit Duraloc DePuy JJ	388	7	1,8
cem Surgival	105	2	1,9
press fit Mallory Biomet	51	1	2,0
cem Apollo Biomet	174	4	2,3
press fit Trilogy Zimmer	1711	40	2,3
press fit ANCA Crem	37	1	2,7
press fit RM Mathys	286	8	2,8
cem LIMA	340	16	4,7
press fit MPF Endoplus	212	11	5,2
press fit Pipino CFP Link	444	24	5,4
press fit SPH Lima	46	3	6,5
cem S&N	45	3	6,7
cem Durasul Zimmer	82	6	7,3
navojna Bicon (ZM) Endoplus	619	49	7,9
press fit EHS-E Crem/Wright	317	28	8,8
cem Ultima DePuy JJ	60	7	11,7
press fit Doets Endoplus	515	74	14,4
izoelastična Mathys	59	10	16,9

Revision rate for acetabular components from 2002 to 2019

SURVIVAL OF DIFFERENT BEARINGS

End of Follow-up: 31.12.2019



	Chi-Square	df	Sig.
Log Rank (Mantel-Cox)	62,065	5	0,000

MoM: After 17,8 y observed survival is 98,4 % (95 % CI = 95,8% - 101,5 %)

CoXP: After 13,9 y observed survival is 98,3 % (95 % CI = 97,5 % - 99,1 %)

MoXP: After 17,3 y observed survival is 96,5 % (95 % CI = 95,7 % - 97,3 %)

CoP: After 17,3 y observed survival is 93,3 % (95 % CI = 90,9 % - 95,7 %)

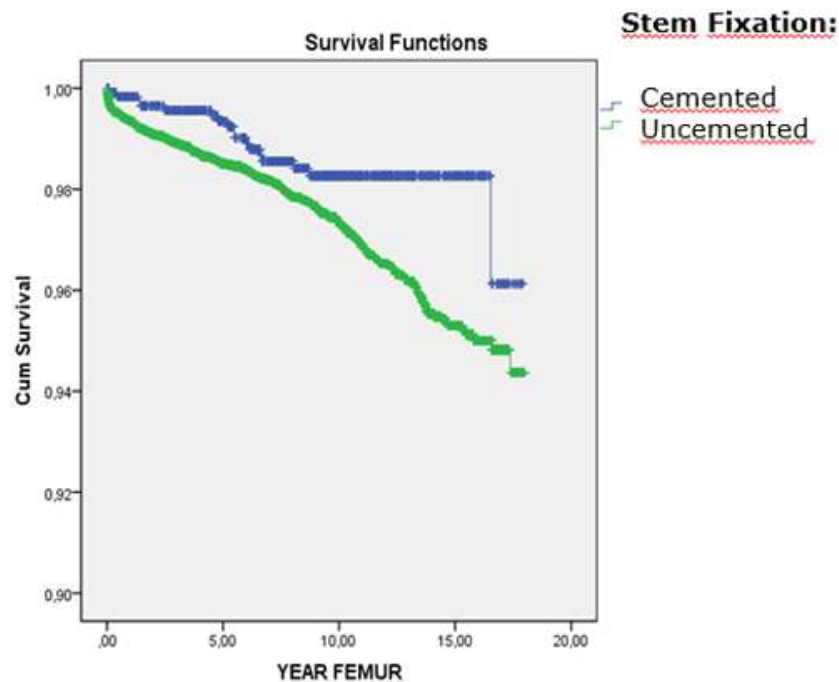
CoC: After 17,1 y observed survival is 90,6 % (95 % CI = 88,4 % - 92,8 %)

MoP: After 16,9 y observed survival is 87,5 % (95 % CI = 85,9 % - 89,1 %)

From 47 THR with MoM bearings is 44 resurfacing, no revised till now.

SURVIVAL OF CEMENTED/UNCEMENTED FEMORAL STEMS

End of Follow-up: 31.12.2019

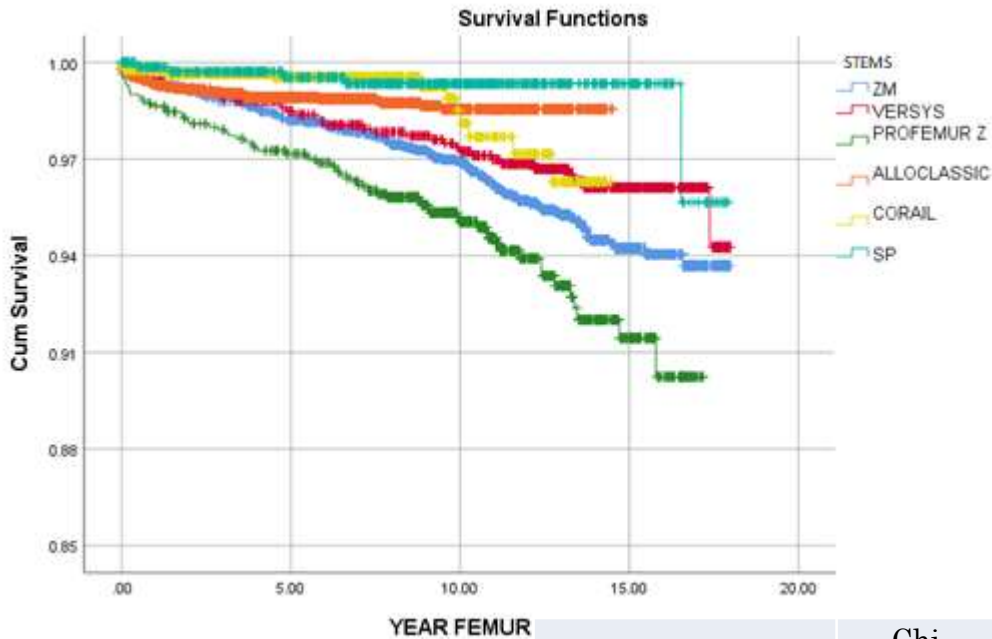


	Chi-Square	df	Sig.
Log Rank (Mantel-Cox)	6,864	1	0,009

Cemented: after **17,7** y observed survival is **98,3 %** (95 % CI = **97,5 % - 99,1 %**)

Uncemented. After **17,5** y observed survival is **95,0 %** (95 % CI = **94,2 - 95,8 %**)

SURVIVAL OF THE 5 MOST COMMON FEMORAL STEMS



End of Follow-up:
31.12.2019

	Chi-Square	df	Sig.
Log Rank (Mantel-Cox)	66,166	5	0,000

Alloclassic: After **14,4** y observed survival is **98,5 %** (95 % CI = 98,1 % - 98,9 %)

Corail: After **14,3** y observed survival is **96,3 %** (95 % CI = 93,8 % - 98,8 %)

SPII Lubinus Link: After **17,9** y observed survival is **95,7 %** (95 % CI = 88,6 % - 102,8 %)

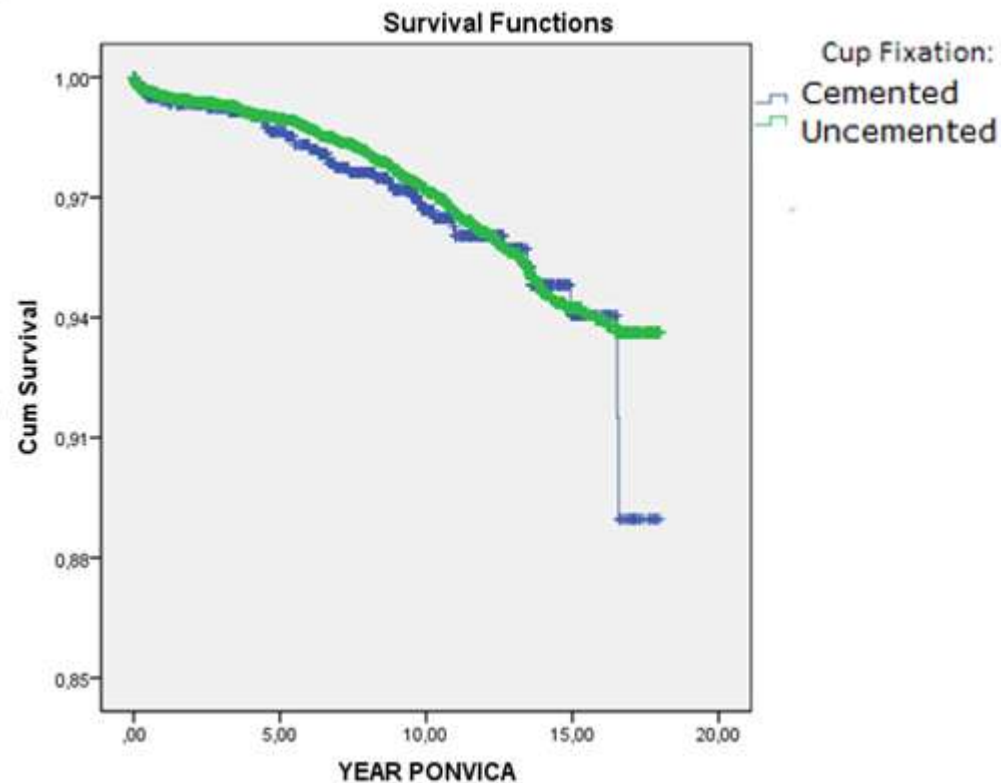
Versys: After **17,5** y observed survival is **94,3 %** (95 % CI = 90,6 % - 98,0 %)

SL-Plus (ZM): After **17,4** y observed survival is **93,7 %** (95 % CI = 92,3 % - 95,1 %)

Profemur Z: After **16,4** y observed survival is **90,1 %** (95 % CI = 86,9 % - 93,5 %)

SURVIVAL OF CEMENTED/UNCEMENTED ACETABULAR COMPONENTS

End of Follow-up: 31.12.2019



Overall Comparisons			
	Chi-Square	df	Sig.
Log Rank (Mantel-Cox)	0,513	1	0,474

Uncemented: After **17,5** y observed survival is **93,6 %** (95 % CI = **92,6 % - 94,6 %**)

Cemented: After **17,4** y observed survival is **89,0 %** (95 % CI = **81,7 % - 96,3 %**)

ARTHROPLASTY REGISTRIES IN EU





Valdoltra

Arthroplasty Registry

Citation:

Levašič V, Milošev I. Valdoltra Arthroplasty Registry [Internet]. Orthopaedic Hospital Valdoltra. [cited 2020 June 20]. Available from: <http://www.ob-valdoltra.si/sl/international>