

VALDOLTRA HIP ARTHROPLASTY REGISTRY REPORT 2018



Valdoltra
Arthroplasty Registry

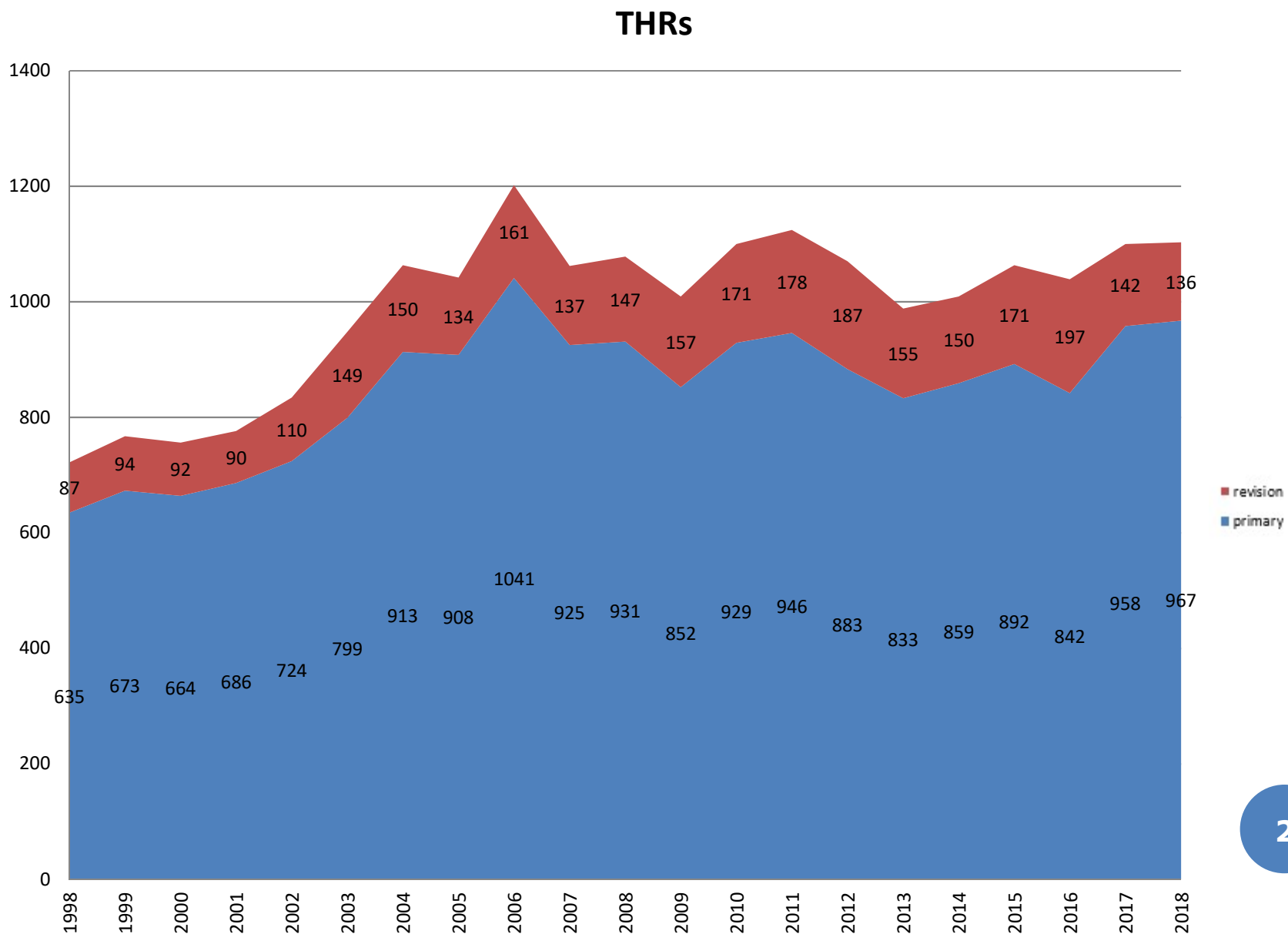
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December 2019

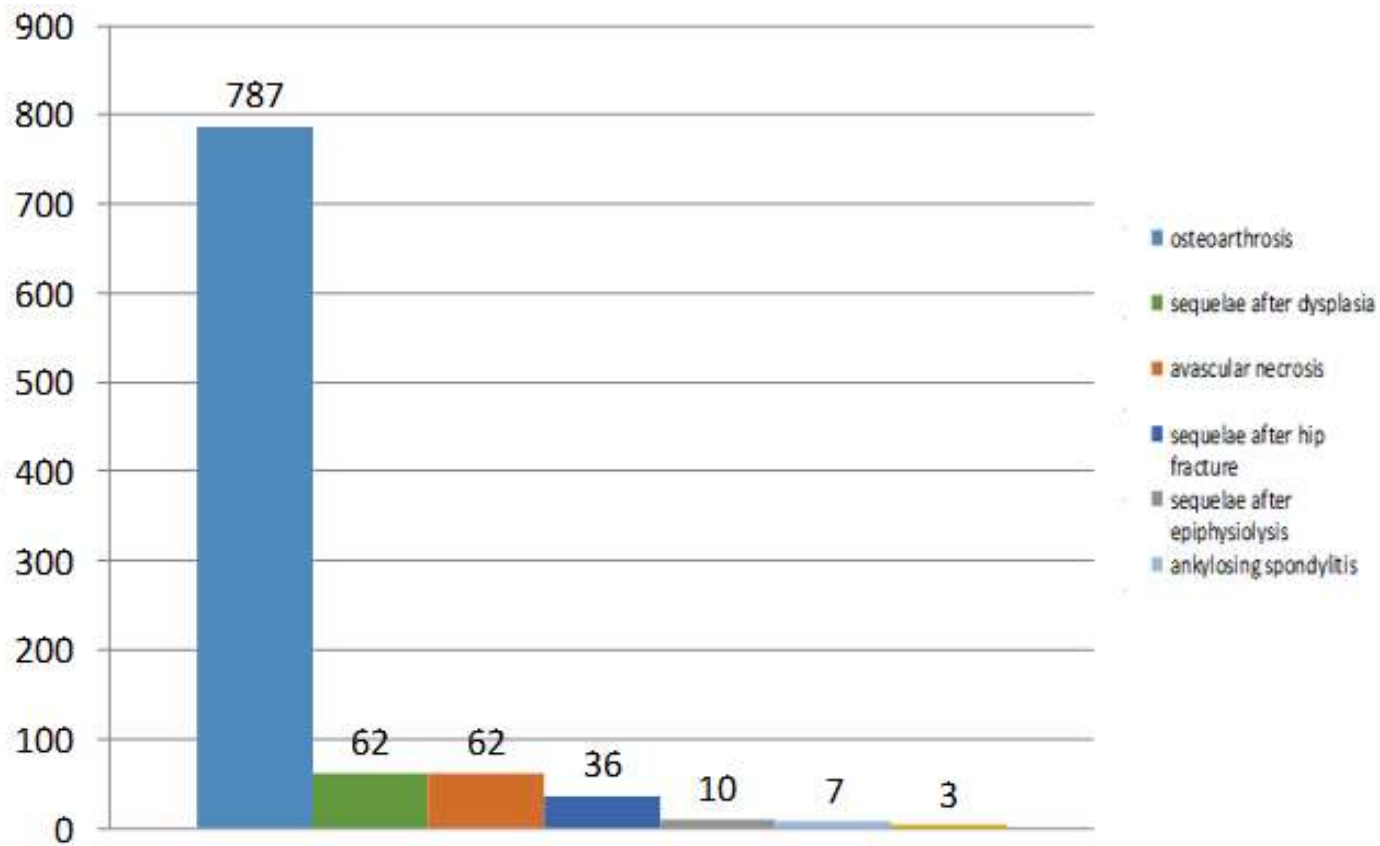
Primary and revision THR by year



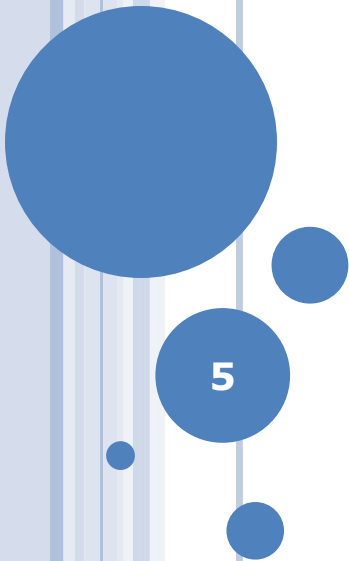
Patient data for primary THR 2018

- Men – Women = 47% to 53%
- Average age = 66 y men and 69 y women
- Right - left = 53% to 47%
- Average preoperative Harris Hip Score = 56 ± 18 pts
- 78 % overweight and obese ($BMI \geq 25$)
- Approach: 55 % direct lateral, 44 % anterior and 1 % anterolateral
- Average duration of operation 67 ± 16 min
- Systemic antibiotic prophylaxis at all operation except 1 (allergy)

PREOPERATIVE DIAGNOSIS FOR PRIMARY THR IN 2018

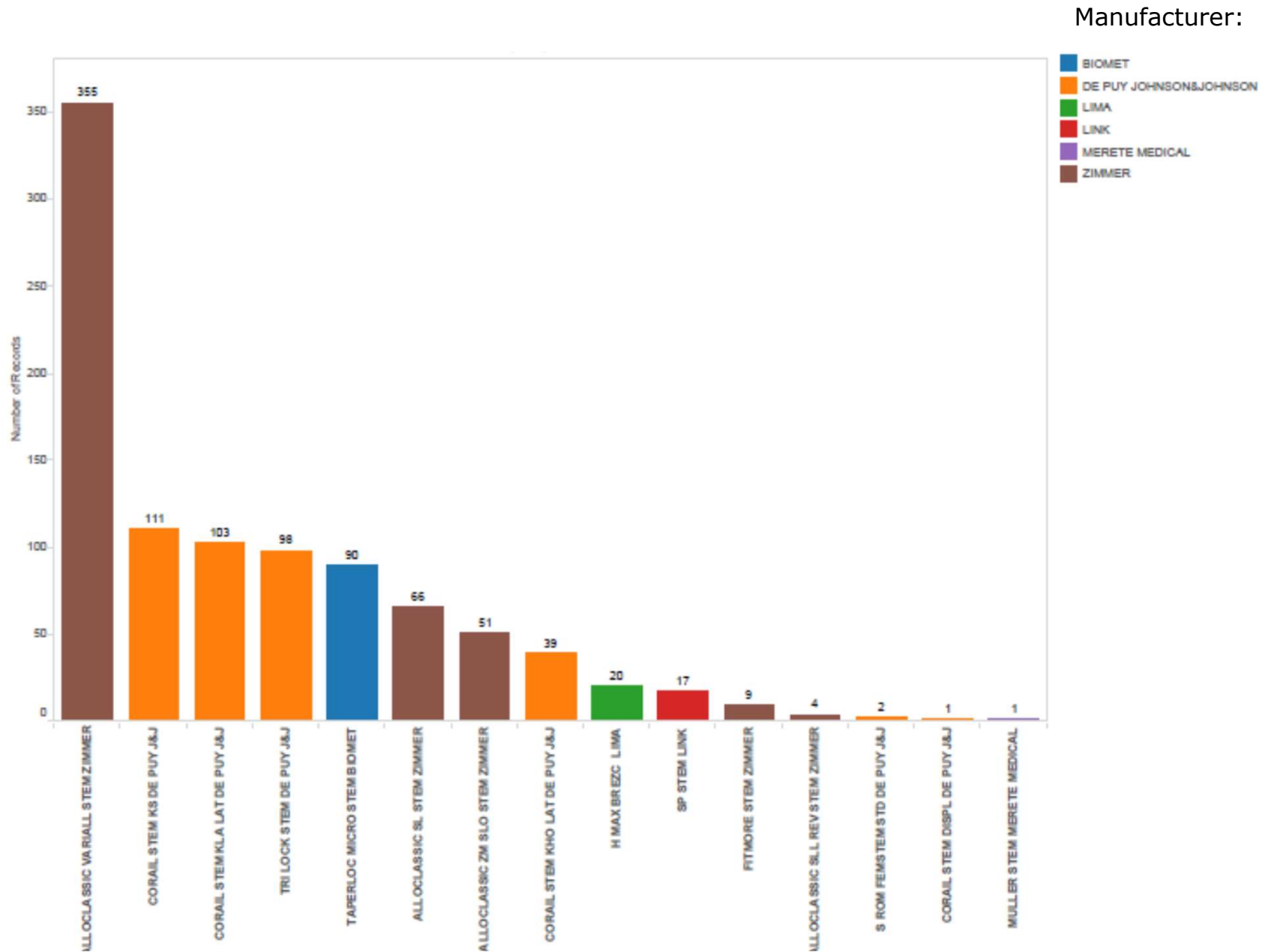


PRIMARY THRS 2018

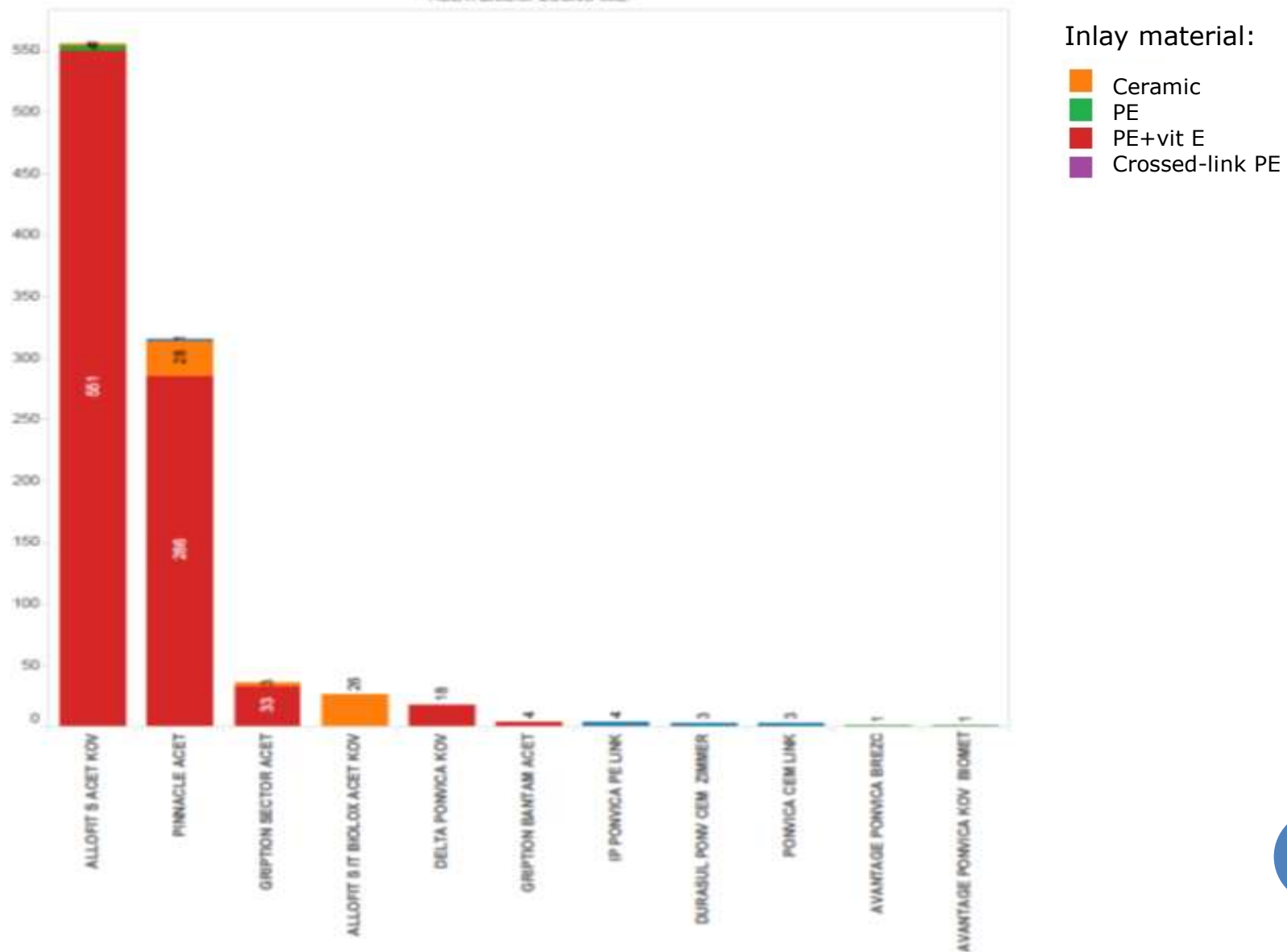


Implanted material

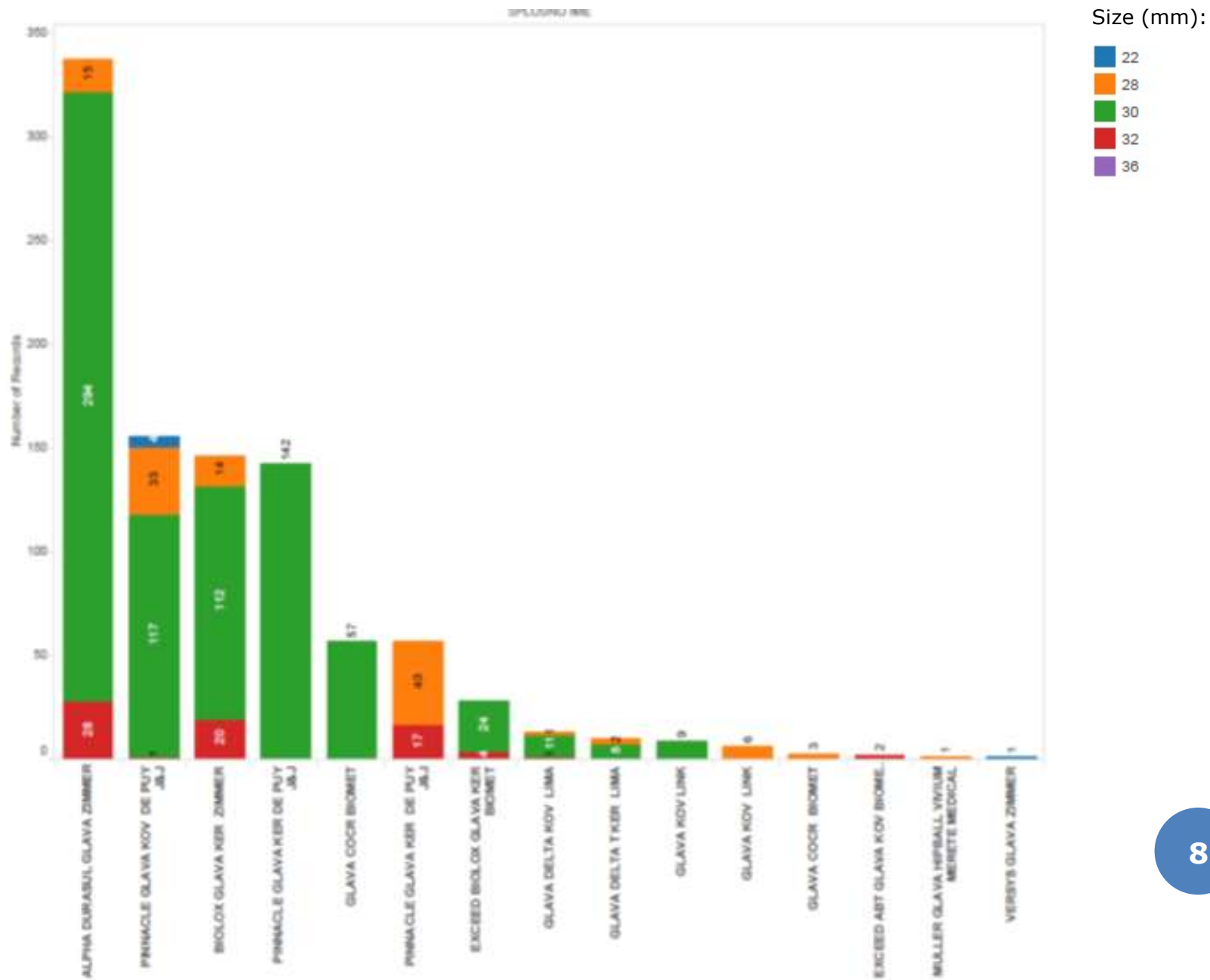
PRIMARY STEMS in 2018, sum 967



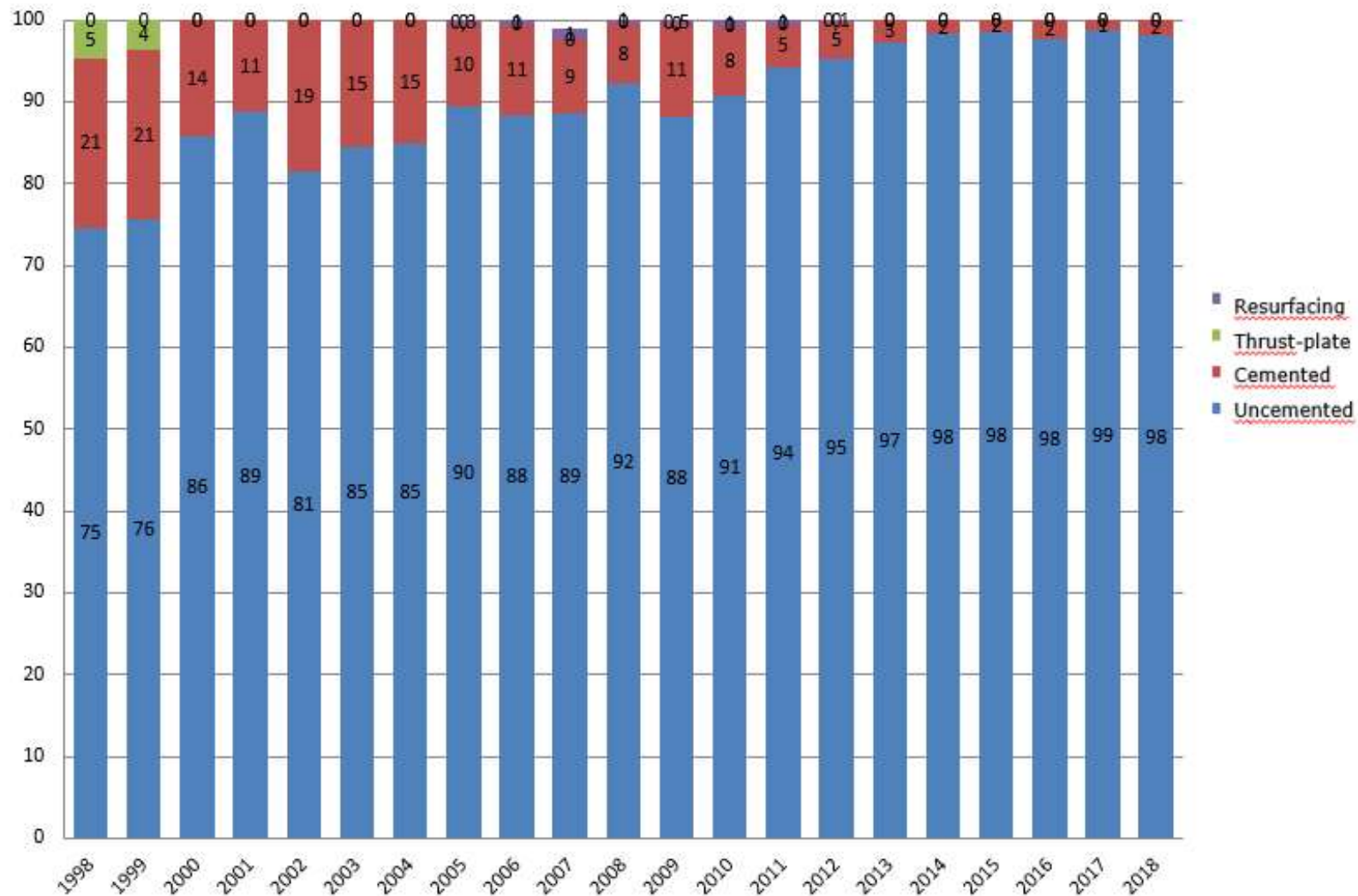
PRIMARY ACETABULAR COMPONENTS IN 2018, SUM 967



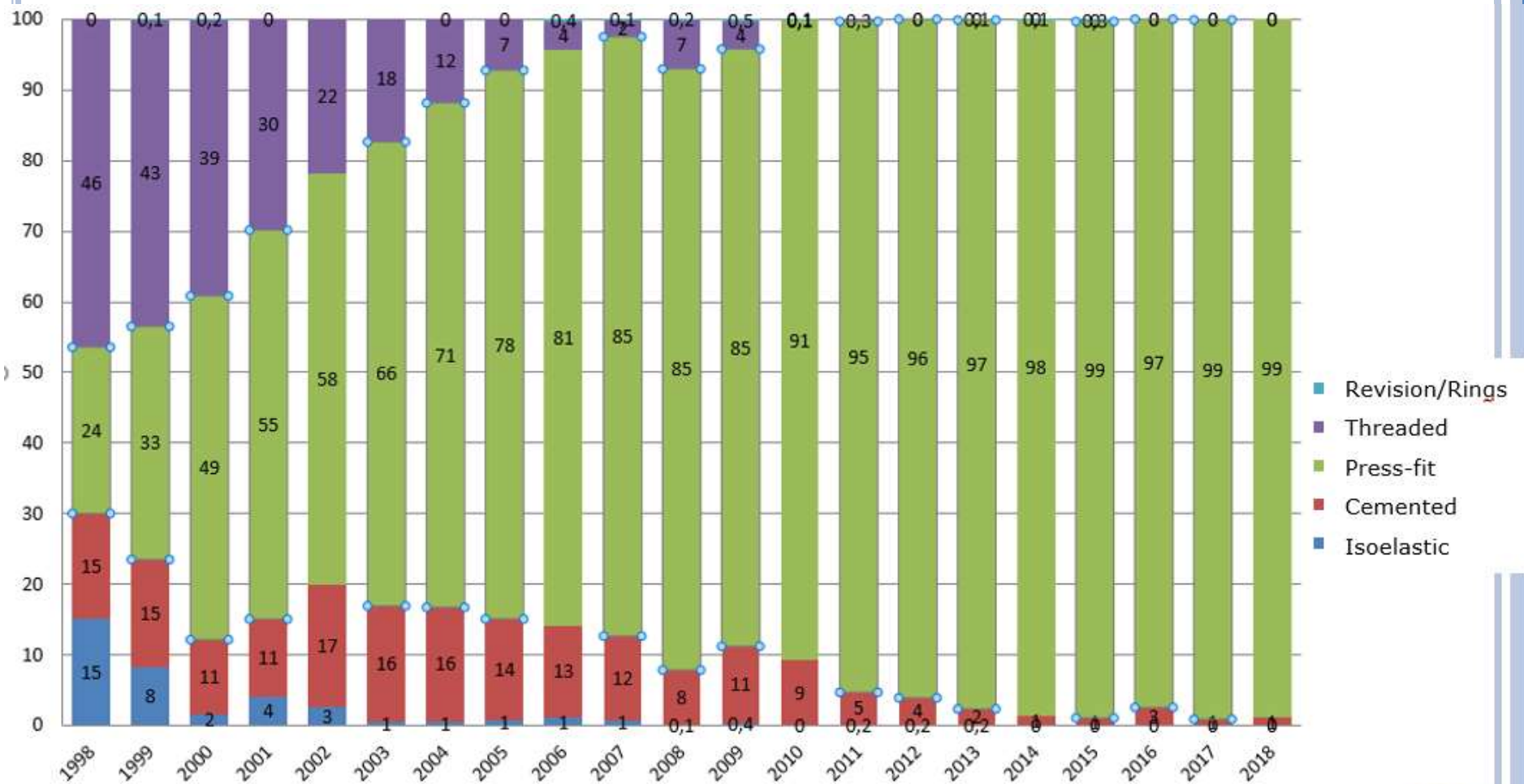
PRIMARY HEADS in 2018, sum 967



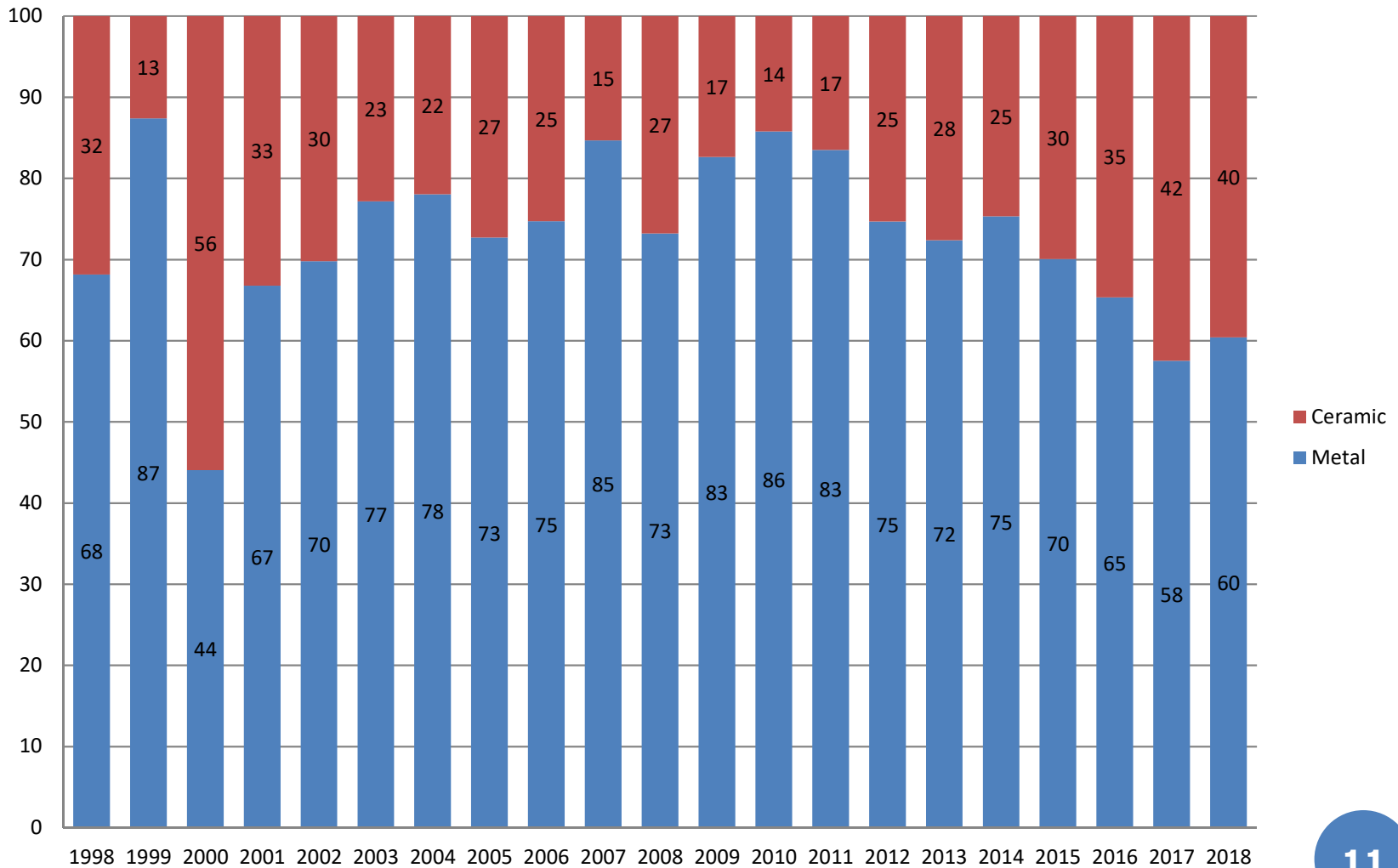
Cemented, uncemented stems, trust-plate and resurfacing prostheses 1998 - 2018



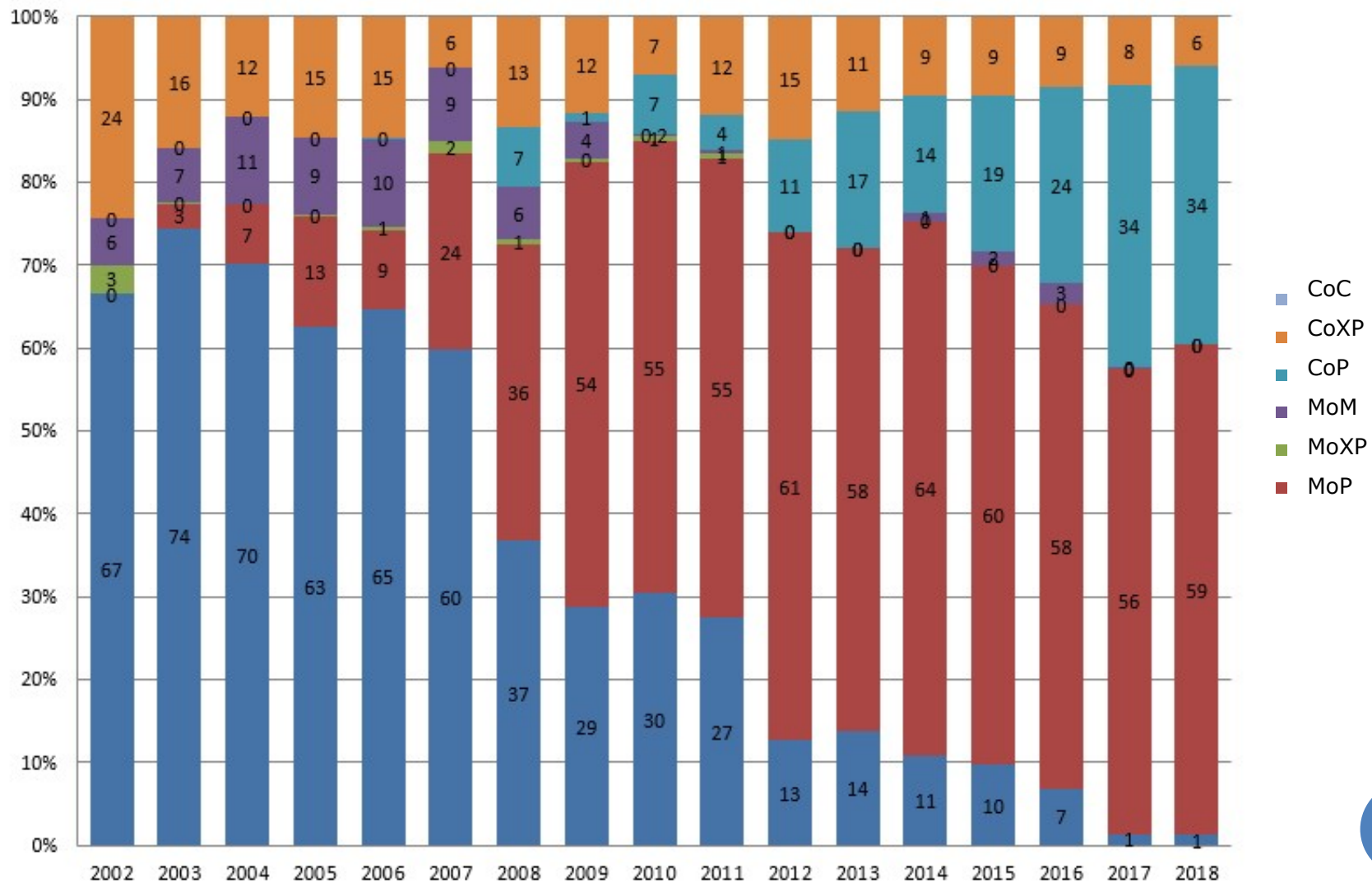
Primary cups by fixation 1998 - 2018



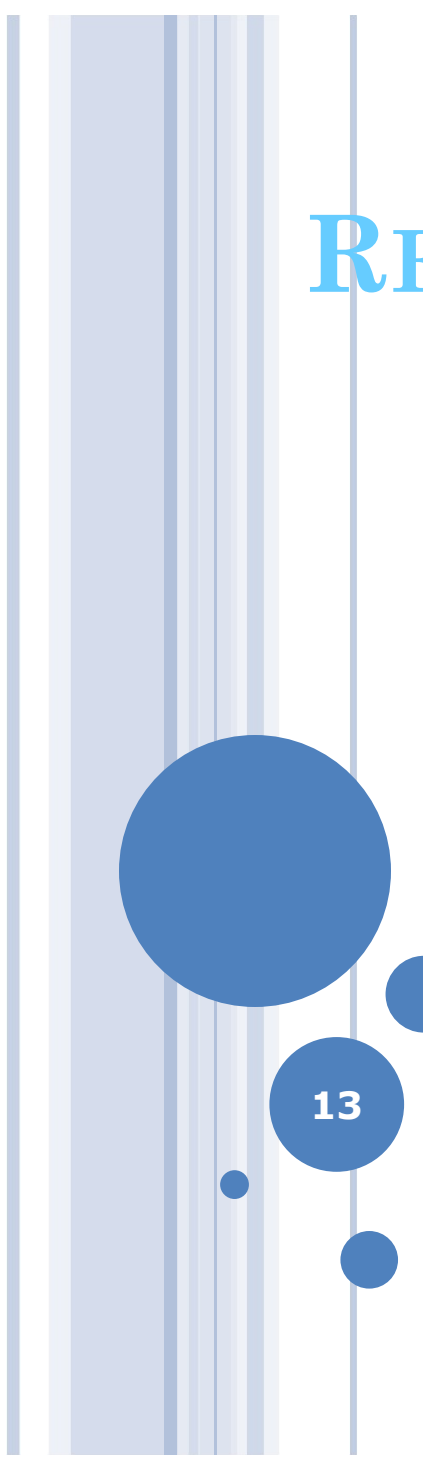
Percentage of metal and ceramic heads 1998 - 2018



BEARING SURFACE 2002 - 2018



REVISION OPERATIONS IN 2018



13

136 revision THRs at 122 patients

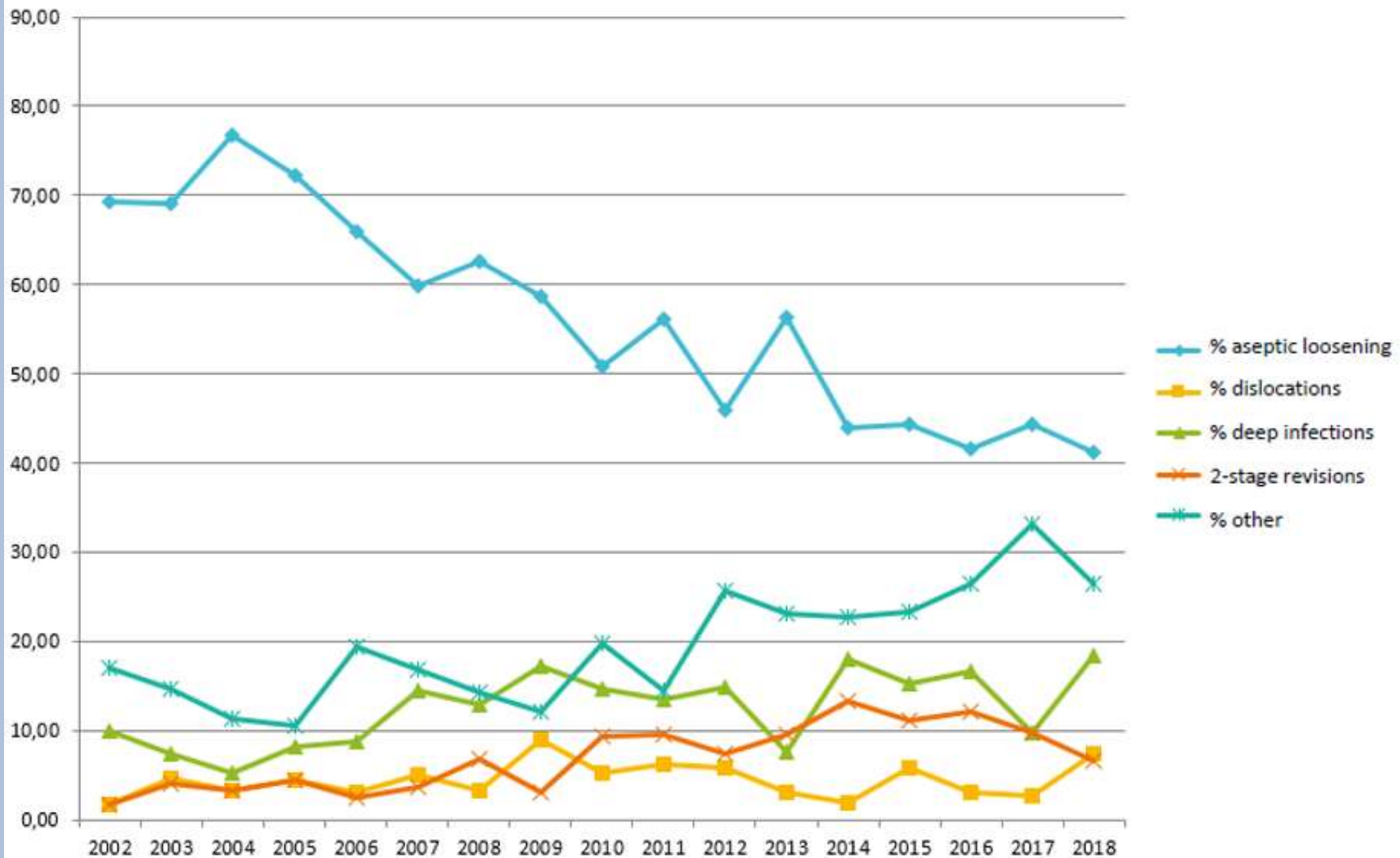
PATIENT DATA FOR REVISIONS 2018

- Men – Women = 46% to 54%
- Average age = 71 y men and 74 y women
- Right - left = 51% to 49%
- Average preoperative Harris Hip Score = 46 ± 19 pts
- 74 % overweight or obese ($BMI \geq 25$)
- Approach in 88 % direct lateral
- Average duration of operation 118 ± 40 min

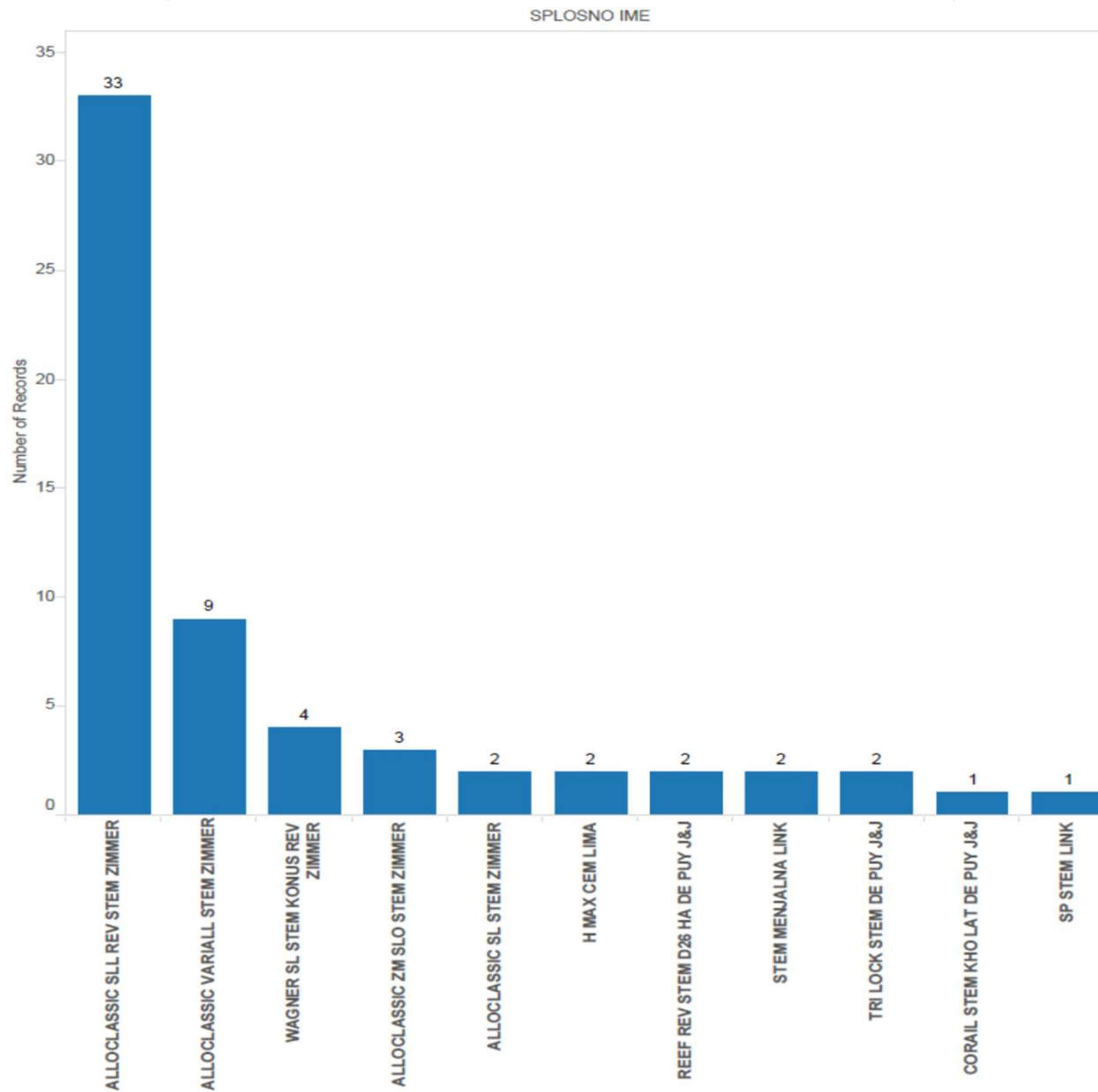
Reasons for revisions hips vs. knees 2002 - 2018

period 2002-2018	Hips (%)	Knees (%)
Aseptic loosening	56,4	20,2
Deep infection	12,6	24,2
Periprosthetic fracture	7,4	2,5
2-stage revision	7	13,2
Other	4,6	7,77
Dislocation	4,5	1,60
Implant broken	2,8	0,86
Osteolysis	2,4	0,00
Pain	2,1	8,5
Metallosis	0,2	0
Instability, nonalignment, poor ROM	0,00	14,4
OA od other compartment	0,00	7,6

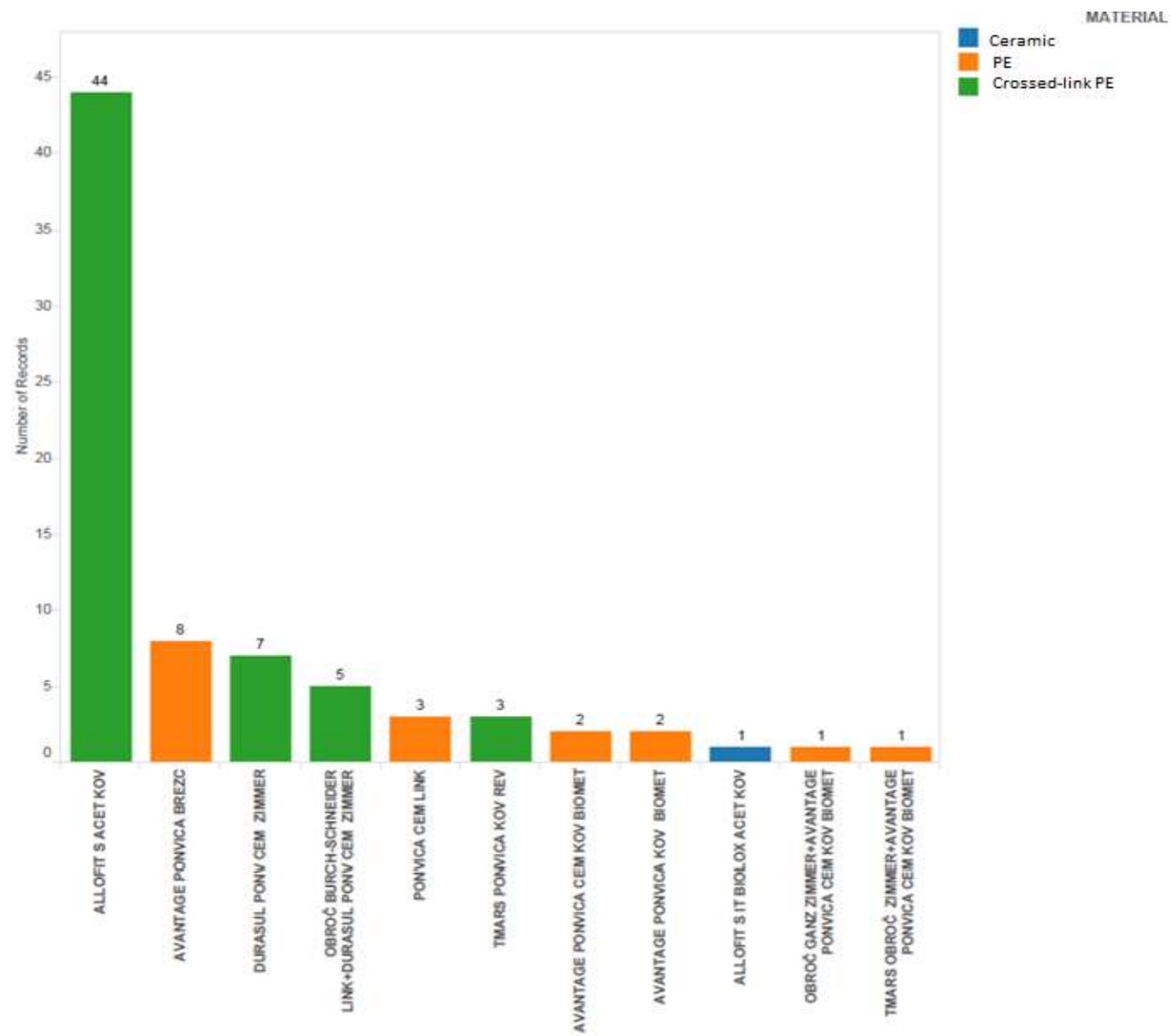
Reasons for revision THRs from 2002 to 2018



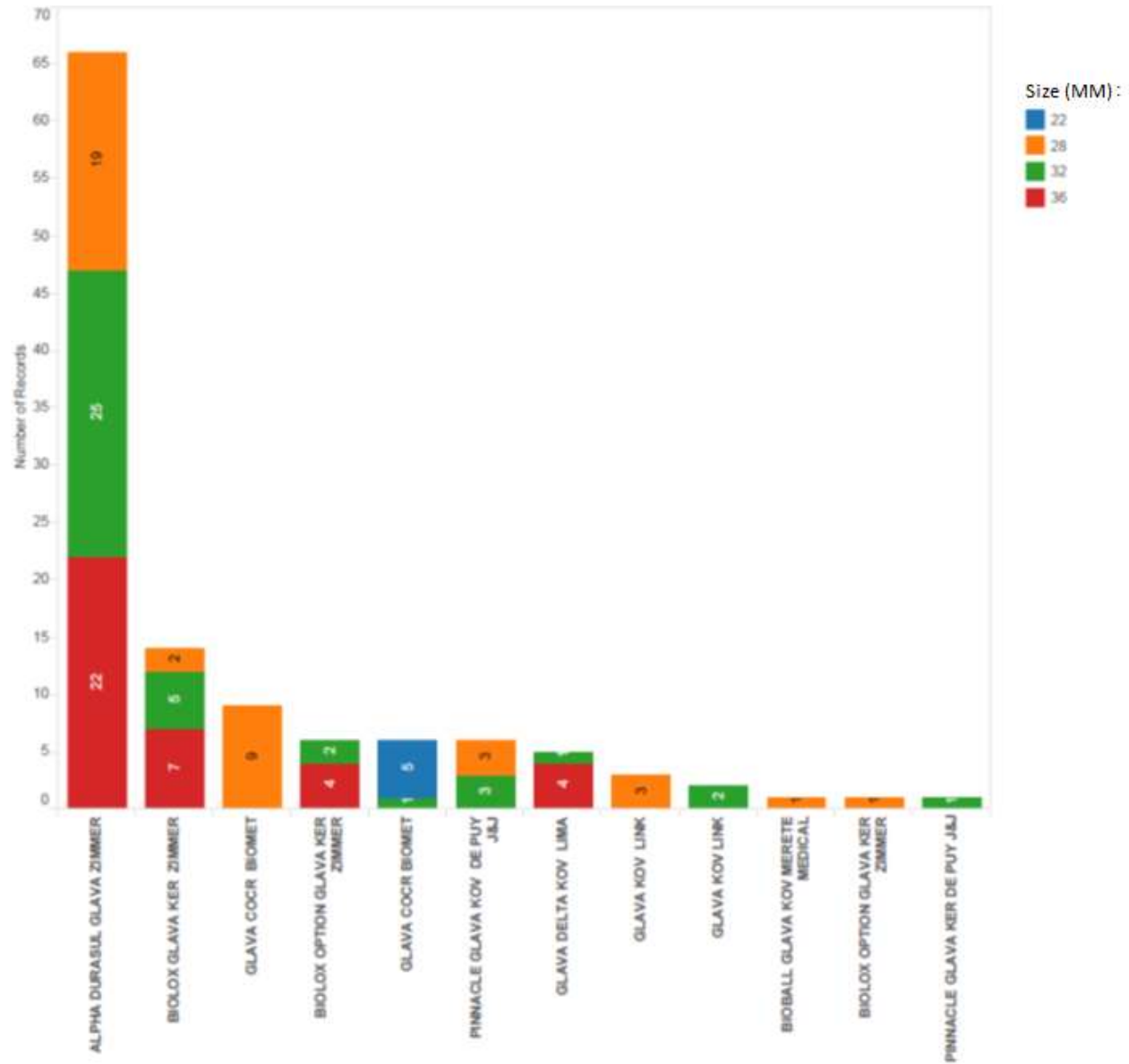
Stems, used in revisions 2018, sum 61



Cups, used at revisions 2018, sum 77



Heads, used at revisions in 2018, sum 120



REVISION BURDEN FOR VALDOLTRA 2002 - 2018

Year	RB (revision burden) = N° of revisions*100/(N° of primaries+ N° V of revisions) in %	N° of revisions for infection*100 / (N° of primaries+ N° 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
Average OBV	12,23 %	1,45 %
Australia AONJRR 17	7,25 %	1,86 %
Sweden SHAR 16	10,99 %	2,00 %

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

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Name	All primaries 02-18	All removed 02-18	% revisions
cem Conserve Wright	44	0	0,0
Trilock stem DePuy Jo&J	139	0	0,0
cem SP Lubinus Link	713	2	0,3
Corail DePuy Jo&J	1618	10	0,6
Taperloc micro Biomet	238	2	0,8
Alloclassic stem Zimmer	5214	56	1,1
H-MAX S Lima	247	3	1,2
Fiber Metal Zimmer	69	1	1,4
Exception stem Biomet	166	3	1,8
Fitmore Zimmer	249	5	2,0
cem Basis SL Smith&Nephew	44	1	2,3
AHS Cremascoli	86	2	2,3
Elite Plus Jo&J	76	2	2,6
C2 LIMA	279	8	2,9
Versys Zimmer	1017	31	3,0
ZM Endoplus-S&N	2682	94	3,5
CBH stem Mathys	362	13	3,6
Profemur Z Cremascoli	1104	44	4,0
cem Metabloc Zimmer	24	1	4,2
Pipino FP LINK	69	3	4,3
rebrasta LINK	135	7	5,2
Copf (Chendo+Unior)	128	8	6,3
Anca Cremascoli	16	1	6,3
cem ATL Unior	17	2	11,8
Quadra stem Medacta	15	3	20,0

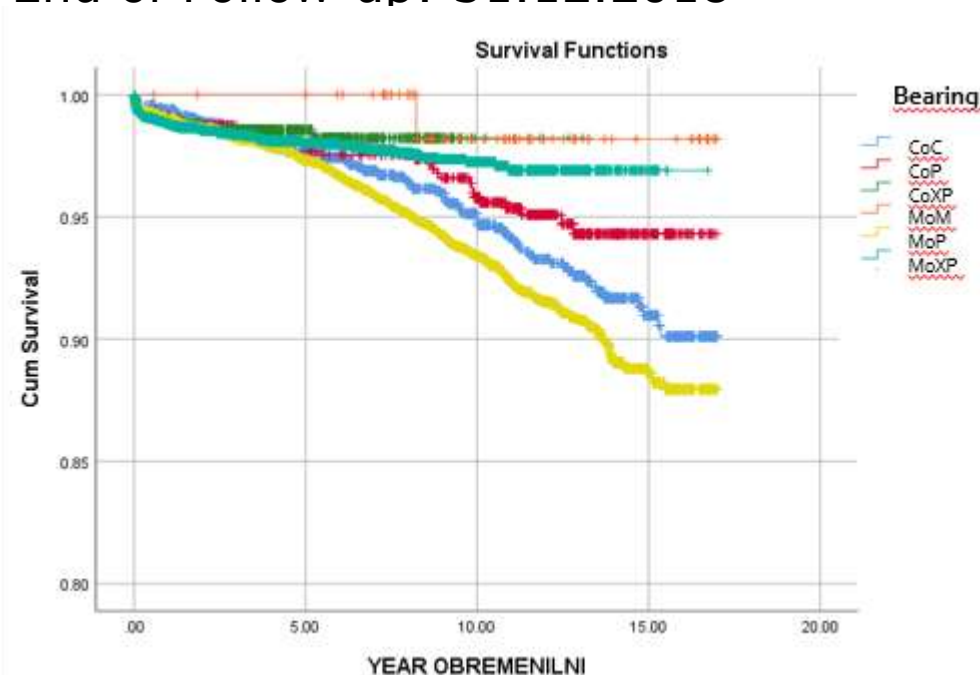
**Revision
rate for
femoral
stems
from 2002
to 2018**

Name	All primaries 02-18	All removed 02-18	% revisions
press fit Selexys Mathys	129	0	0,0
press fit Gription Jo&J	99	0	0,0
press fit G7 Biomet	57	0	0,0
preplastitvena Conserve Wright	47	0	0,0
press fit Pinnacle Jo&J	1411	1	0,1
cem IP Link	342	2	0,6
press fit Exceed ABT Biomet	157	1	0,6
press fit Delta Lima	528	4	0,8
press fit Allofit Zimmer	6525	55	0,8
press fit Procoty Wright	149	2	1,3
press fit Duraloc Jo&J	388	6	1,5
cem Surgival	105	2	1,9
press fit Mallory Biomet	51	1	2,0
press fit RM Mathys	286	6	2,1
press fit Trilogy Zimmer	1711	37	2,2
cem Apollo Biomet	174	4	2,3
press fit ANCA Crem	37	1	2,7
cem LIMA	340	15	4,4
press fit Primary MPF Endoplus	212	10	4,7
press fit Pipino CFP Link	444	22	5,0
press fit SPH Lima	46	3	6,5
cem S&N	45	3	6,7
navojna Bicon (ZM) Endoplus	619	45	7,3
cem Durasul Zimmer	78	6	7,7
press fit EHS-E Crem/Wright	317	27	8,5
cem Ultima Jo&J	60	7	11,7
press fit Doets Endoplus	515	73	14,2
izoeastična Mathys	59	9	15,3

**Revision
rate for
acetabular
components
from 2002
to 2018**

SURVIVAL OF DIFFERENT BEARINGS

End of Follow-up: 31.12.2018



	Chi-Square	df	Sig.
Log Rank (Mantel-Cox)	47,929	5	0,000

CoXP: After **13,1** y observed survival is **98,2 %** (95 % CI = **97,2 % - 99,2 %**)

MoM: After **17,0** y observed survival is **98,2 %** (95 % CI = **94,4 % - 102,0 %**)

MoXP: After **16,7** y observed survival is **96,9 %** (95 % CI = **96,1 % - 97,7 %**)

CoP: After **17,0** y observed survival is **94,3 %** (95 % CI = **92,1 % - 96,5 %**)

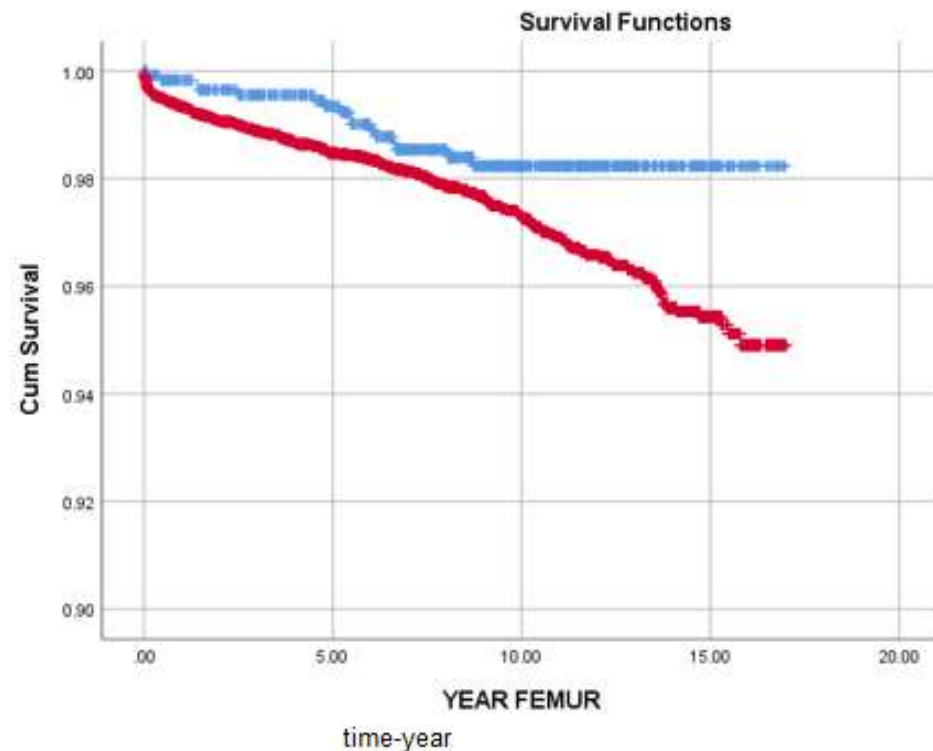
CoC: After **17,0** y observed survival is **90,1 %** (95 % CI = **86,7 % - 92,5 %**)

MoP: After **17,0** y observed survival is **87,9 %** (95 % CI = **86,3 % - 89,5 %**)

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

SURVIVAL OF CEMENTED/UNCEMENTED FEMORAL STEMS

End of Follow-up: 31.12.2018



Stem Fixation:

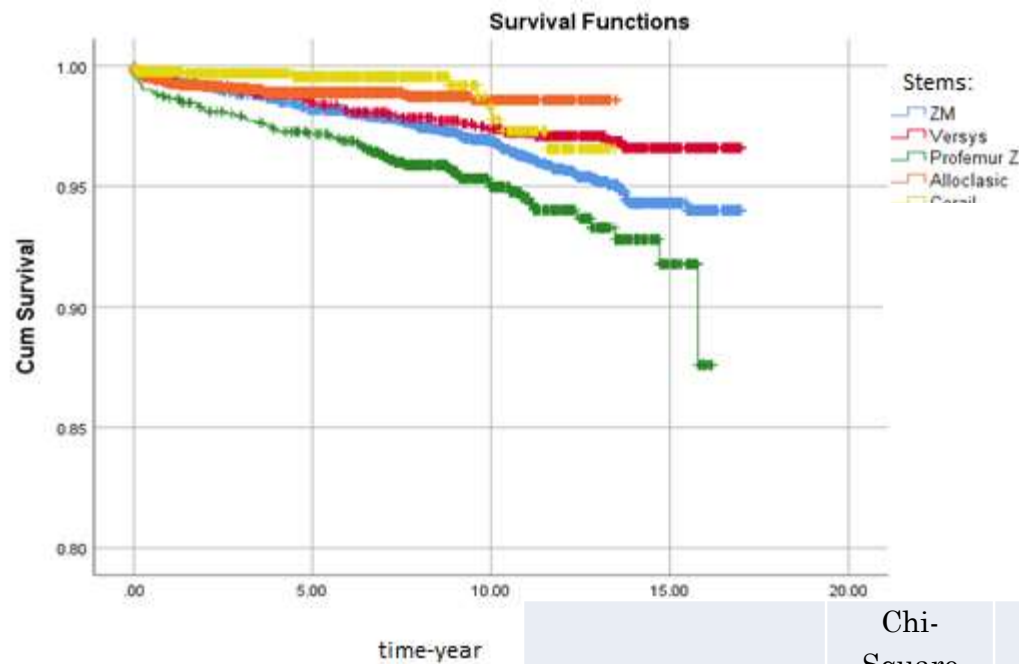
Cemented
Uncemented

	Chi-Square	df	Sig.
Log Rank (Mantel-Cox)	6,516	1	0,011

Cemented: after **17,0** y observed survival is **98,2 %** (95 % CI = **97,4 % - 99,0 %**)

Uncemented. After **17,0** y observed survival is **94,9 %** (95 % CI = **93,9 - 95,8 %**)

SURVIVAL OF THE 5 MOST COMMON FEMORAL STEMS



End of Follow-up:
31.12.2018

	Chi-Square	df	Sig.
Log Rank (Mantel-Cox)	46,256	4	0,000

Alloclassic: After **13,5** y observed survival is **98,6 %** (95 % CI = 98,2 % - 98,0 %)

Versys: After **17,0** y observed survival is **96,7 %** (95 % CI = 95,3 % - 98,0 %)

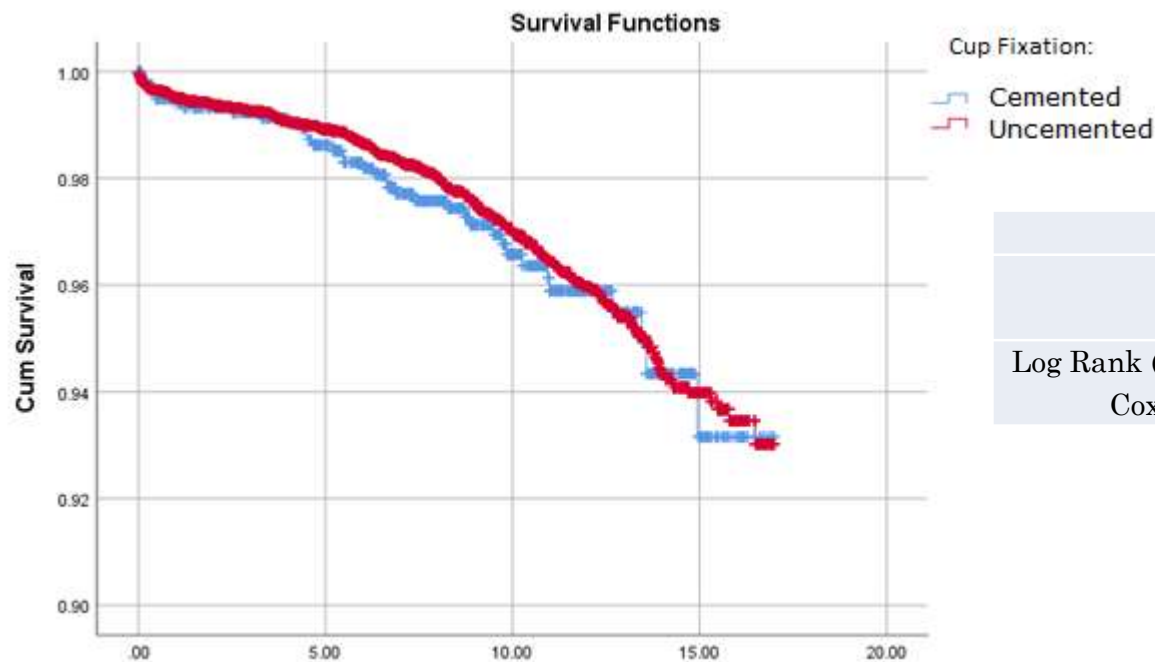
Corail: After **13,5** y observed survival is **96,6 %** (95 % CI = 94,2 % - 99,0 %)

SL-Plus (ZM): After **17,0** y observed survival is **94,0 %** (95 % CI = 92,6 % - 95,4 %)

Profemur Z: After **16,2** y observed survival is **87,6 %** (95 % CI = 79,2 % - 96,0 %)

SURVIVAL OF CEMENTED/UNCEMENTED ACETABULAR COMPONENTS

End of Follow-up: 31.12.2018

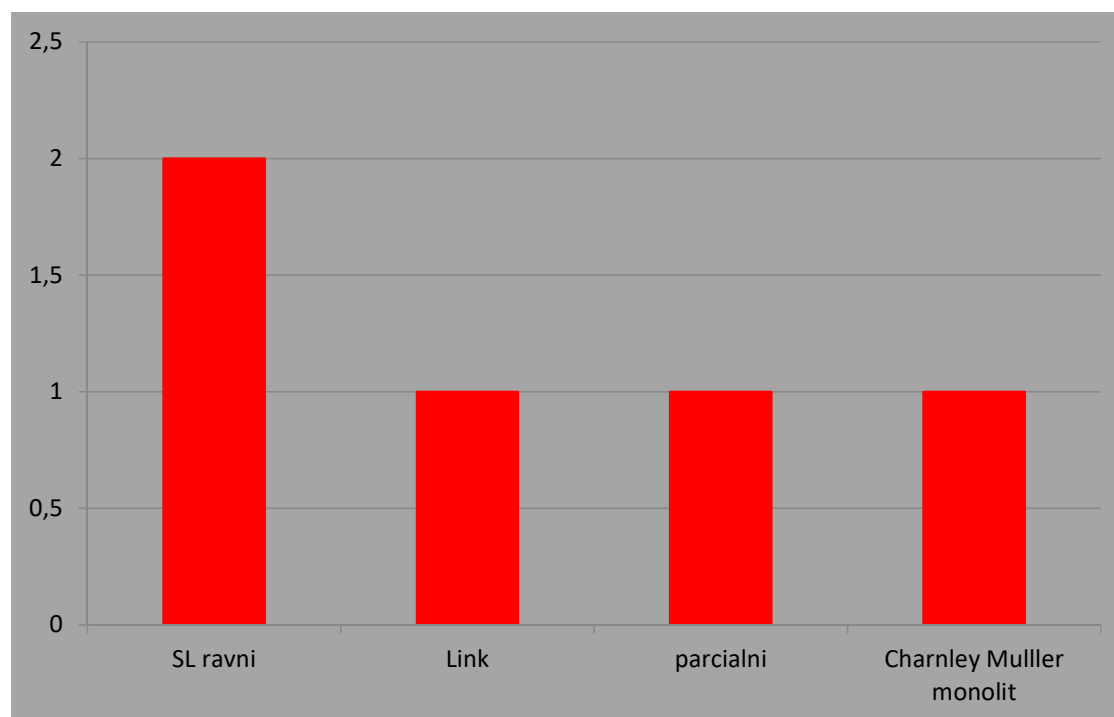


Overall Comparisons			
	Chi-Square	df	Sig.
Log Rank (Mantel-Cox)	0,229	1	0,632

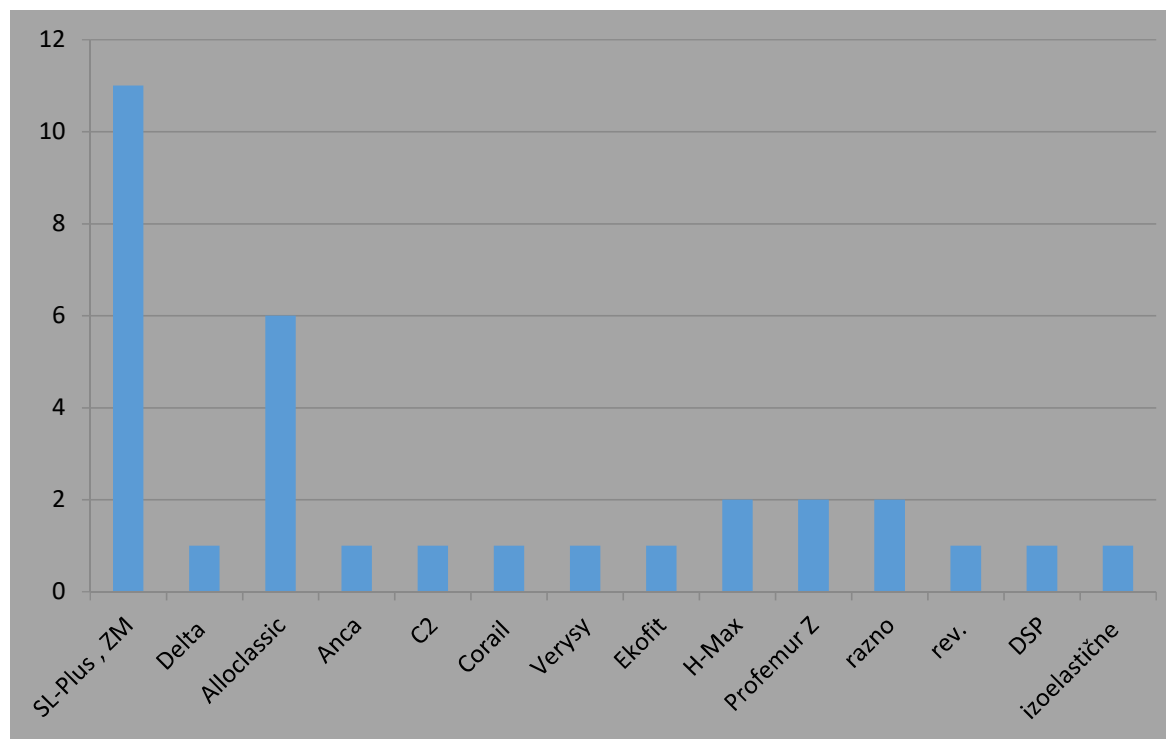
Uncemented: After **17,0** y observed survival is **93,2 %** (95 % CI = **90,1 % - 96,3 %**)

Cemented: After **17,0** y observed survival is **93,0 %** (95 % CI = **91,6 % - 97,4 %**)

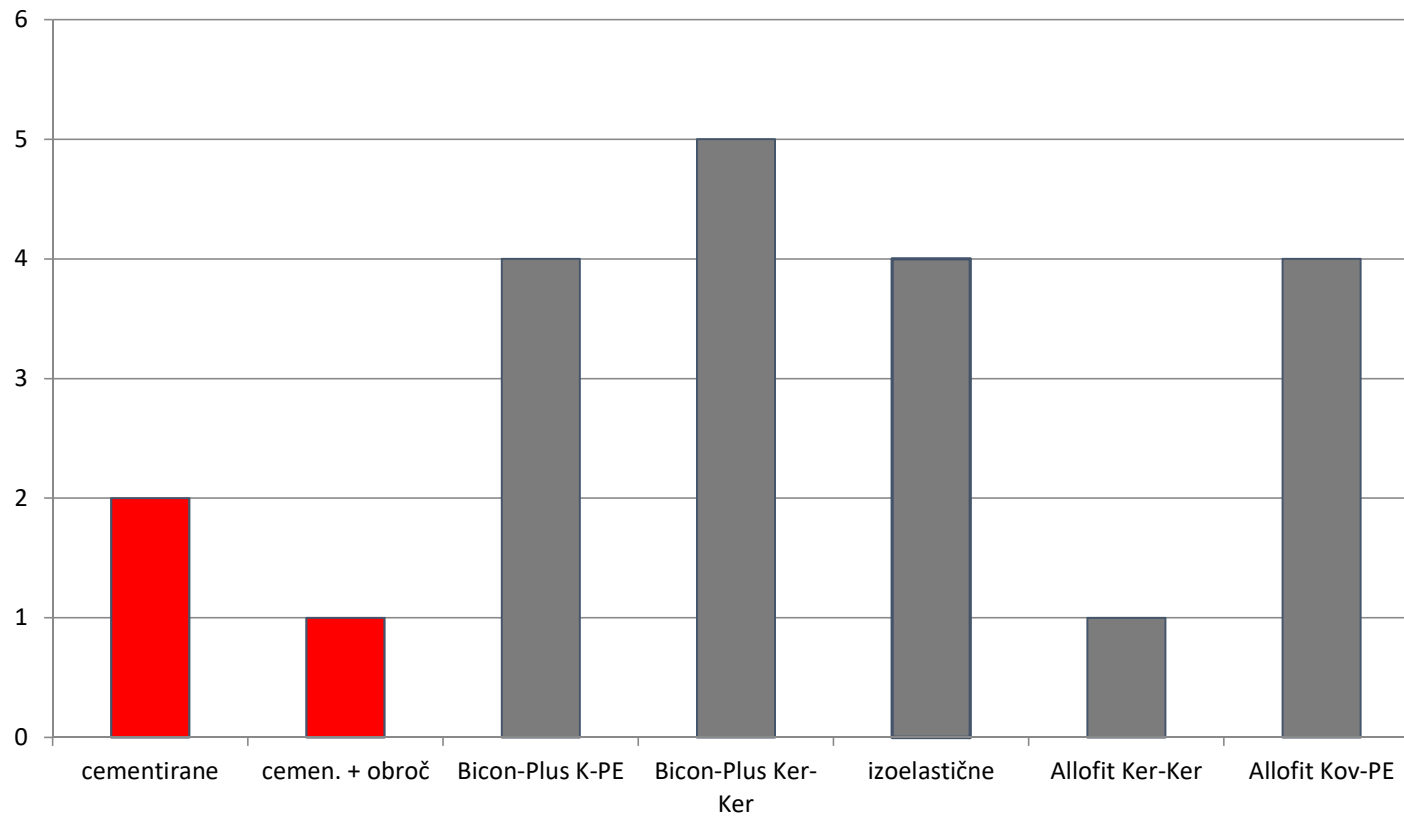
Removed and collected femoral components in 2018 (N° 5) – cemented



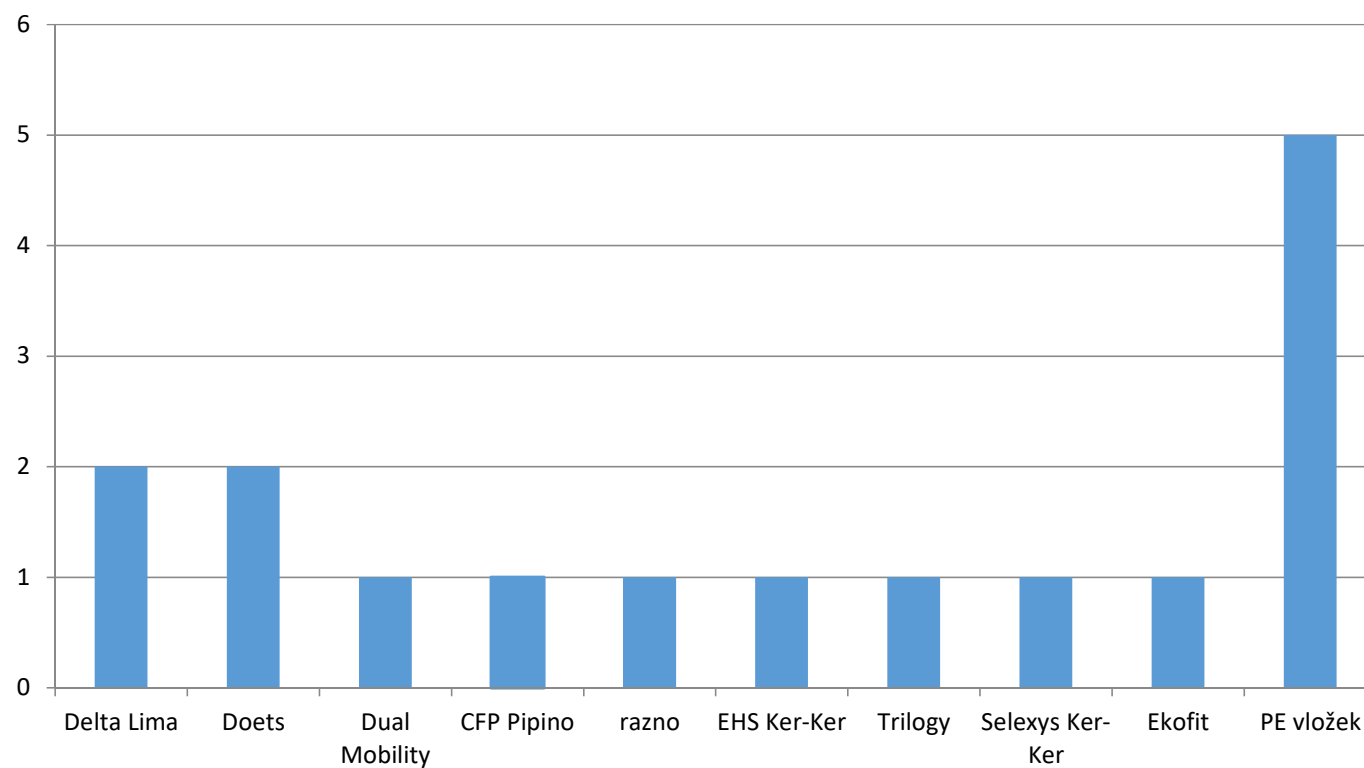
Removed and collected femoral components in 2018 (N°32) – uncemented



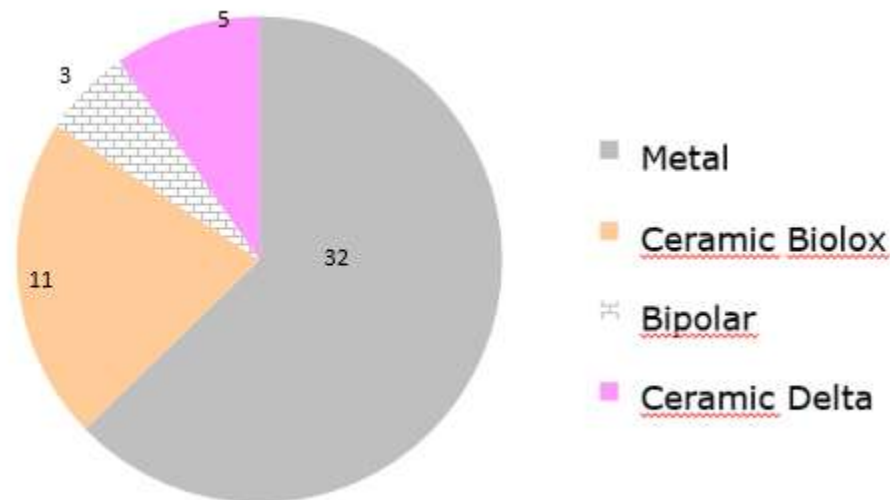
Removed and collected acetabular components in 2018 (N°37) – part 1



Removed and collected acetabular components in 2018 (N°37) – part 2



Removed and collected head components in 2018 (N° 51)

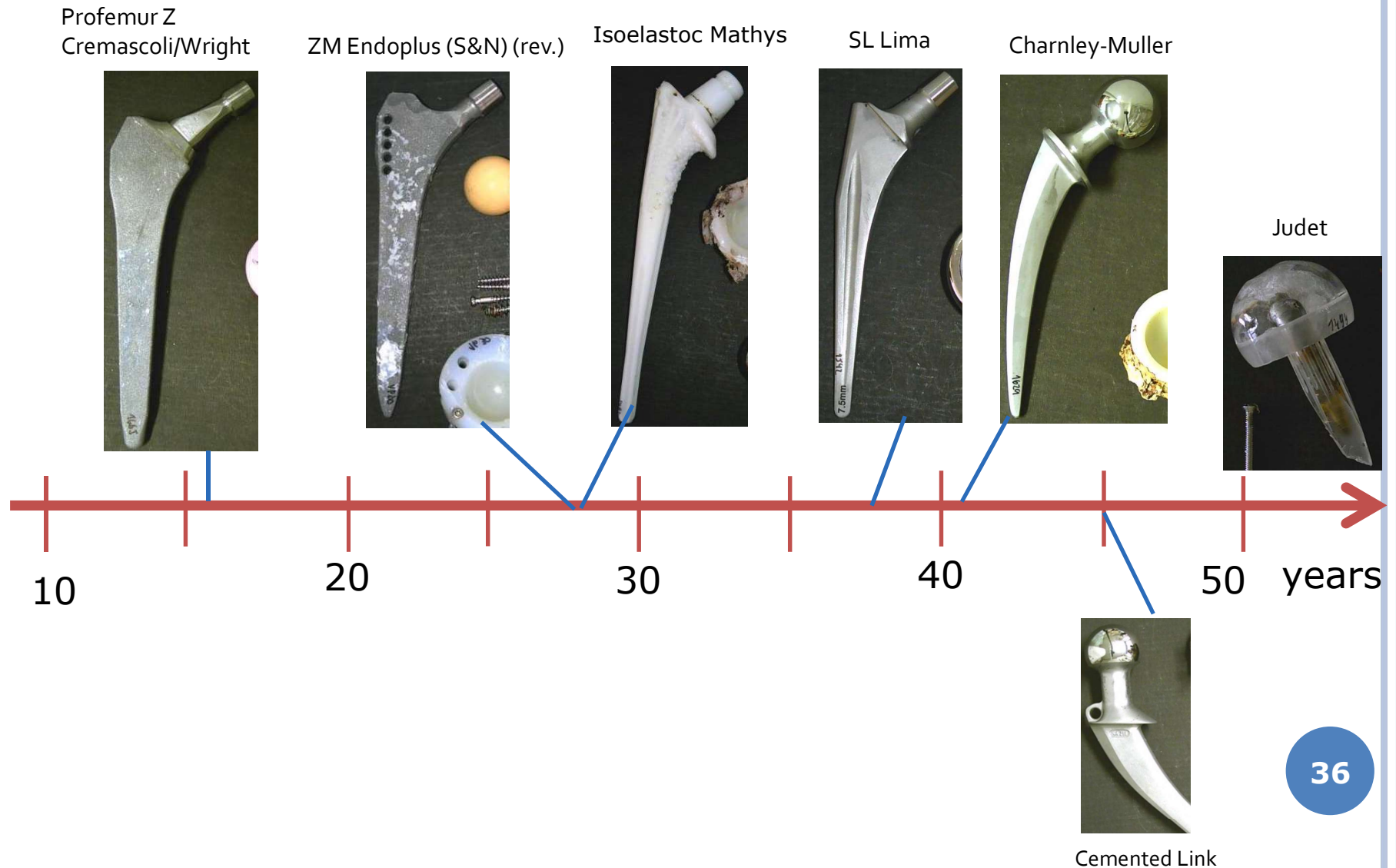








„ The longest time in situ“



ARTHROPLASTY REGISTRIES IN EU





Valdoltra

Arthroplasty Registry

Citation:

Levašič V, Milošev I. Valdoltra Arthroplasty Registry [Internet]. Orthopaedic Hospital Valdoltra. [cited 2019 Dec 27]. Available from: <http://www.ob-valdoltra.si/sl/international>