

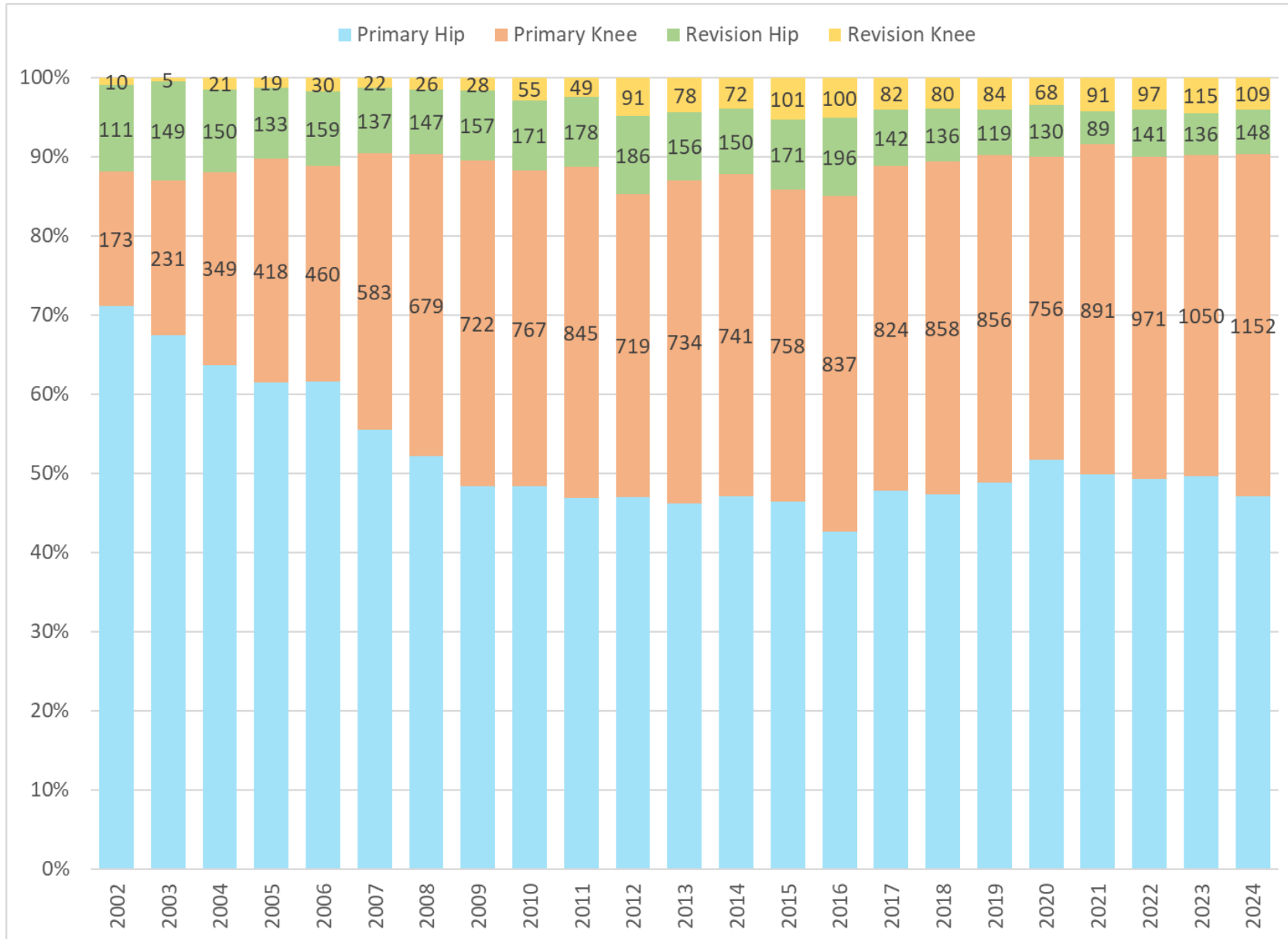


VALDOLTRA HIP ARTHROPLASTY REGISTRY REPORT 2025

Data 2002-2024

Vesna Levašič, PhD, Mateja Blas, MSc, Asst. prof. Simon Kovač,
PhD, Prof. Dr. Eva Podovšovnik, Prof. Dr. Ingrid Milošev, PhD

Entries to Valdoltra Arthroplasty Registry 2002-2023



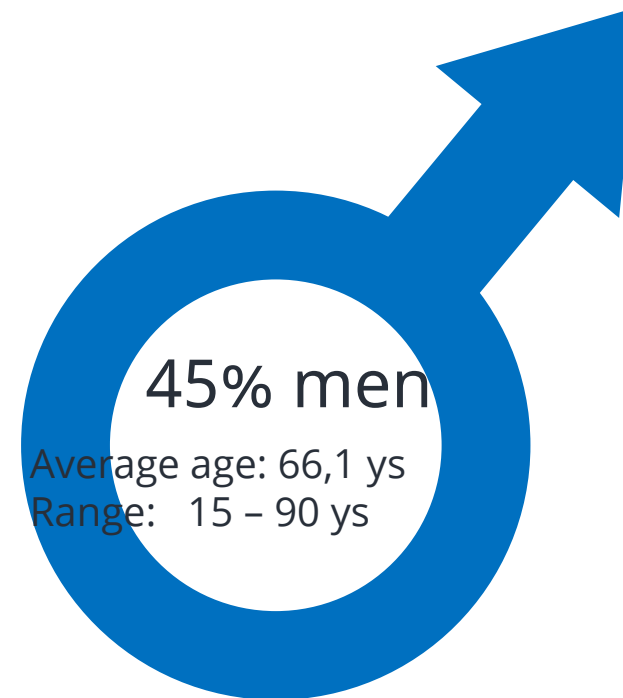
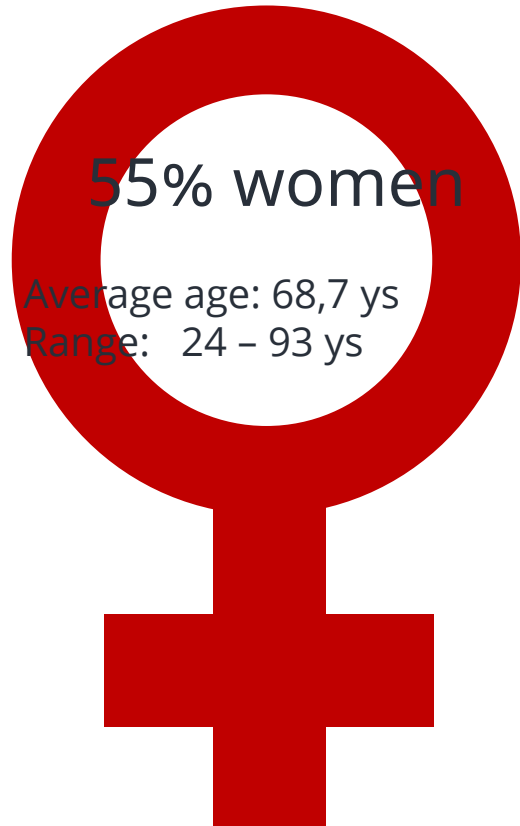
01

PRIMARY TOTAL HIP ARTHROPLASTY 2024

Analysis

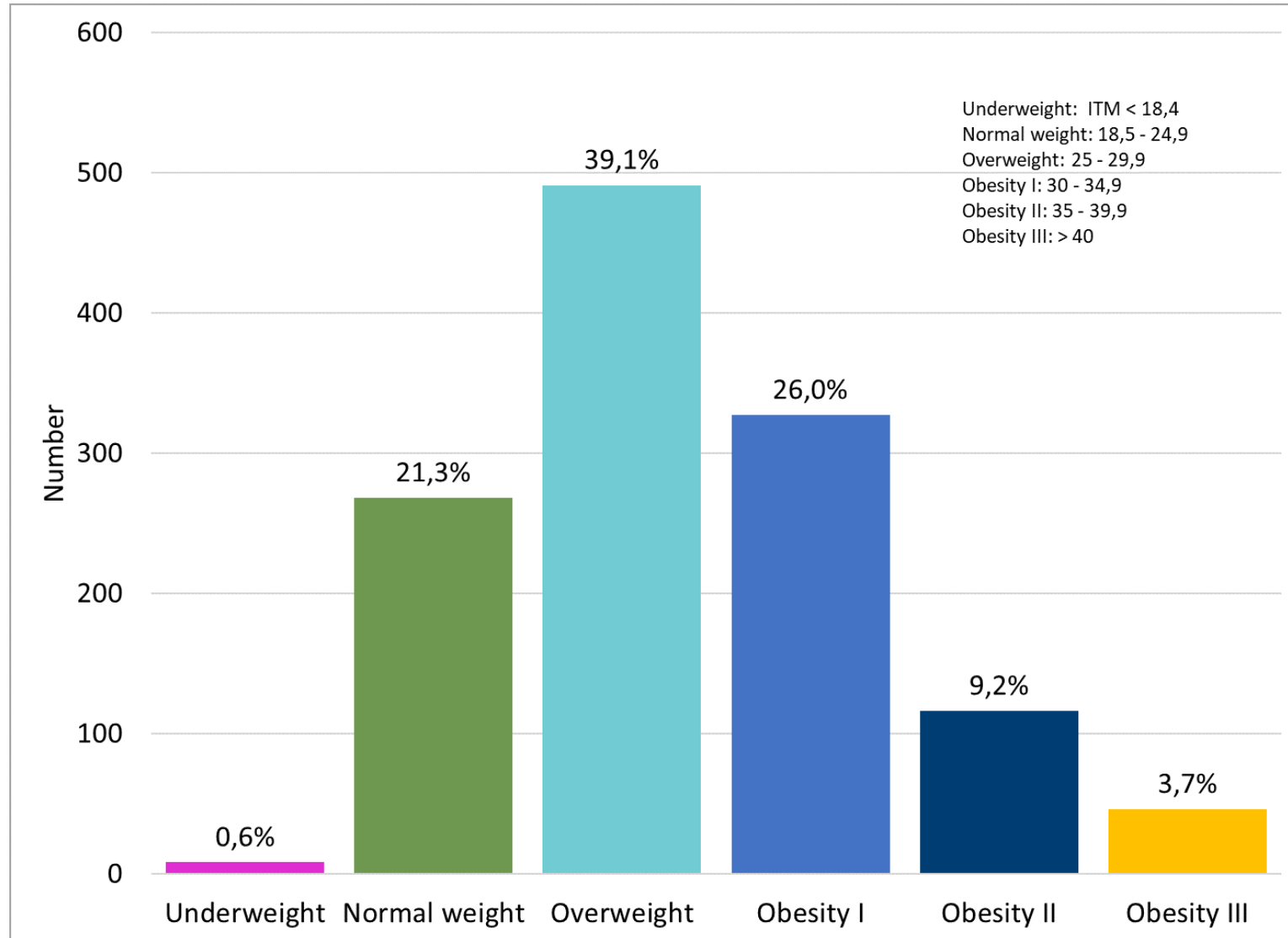
Primary total hip arthroplasty 2024

1256 Primary total hip arthroplasties at 1214 patients (42 patients operated on both sides, 30 of them on the same day)

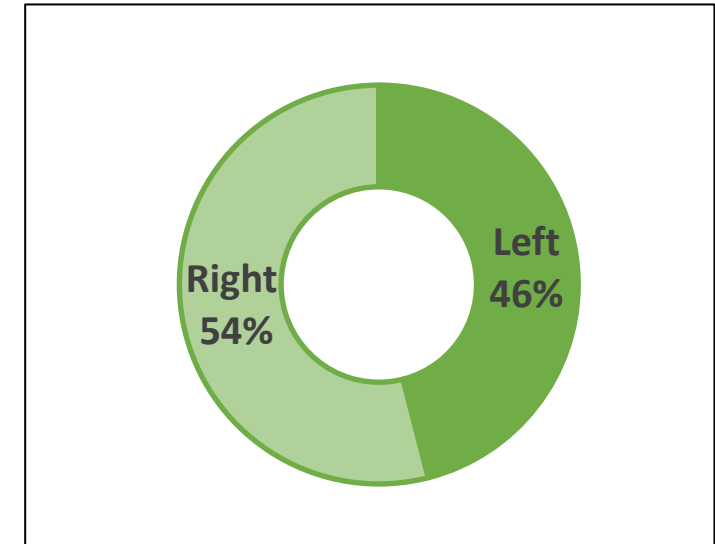


Primary total hip arthroplasty 2024

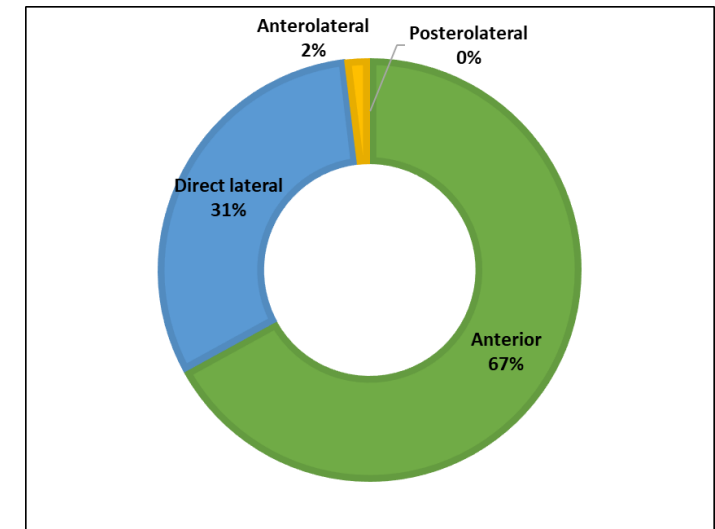
BMI, average: 29.1, range: 16 - 54



Surgery side

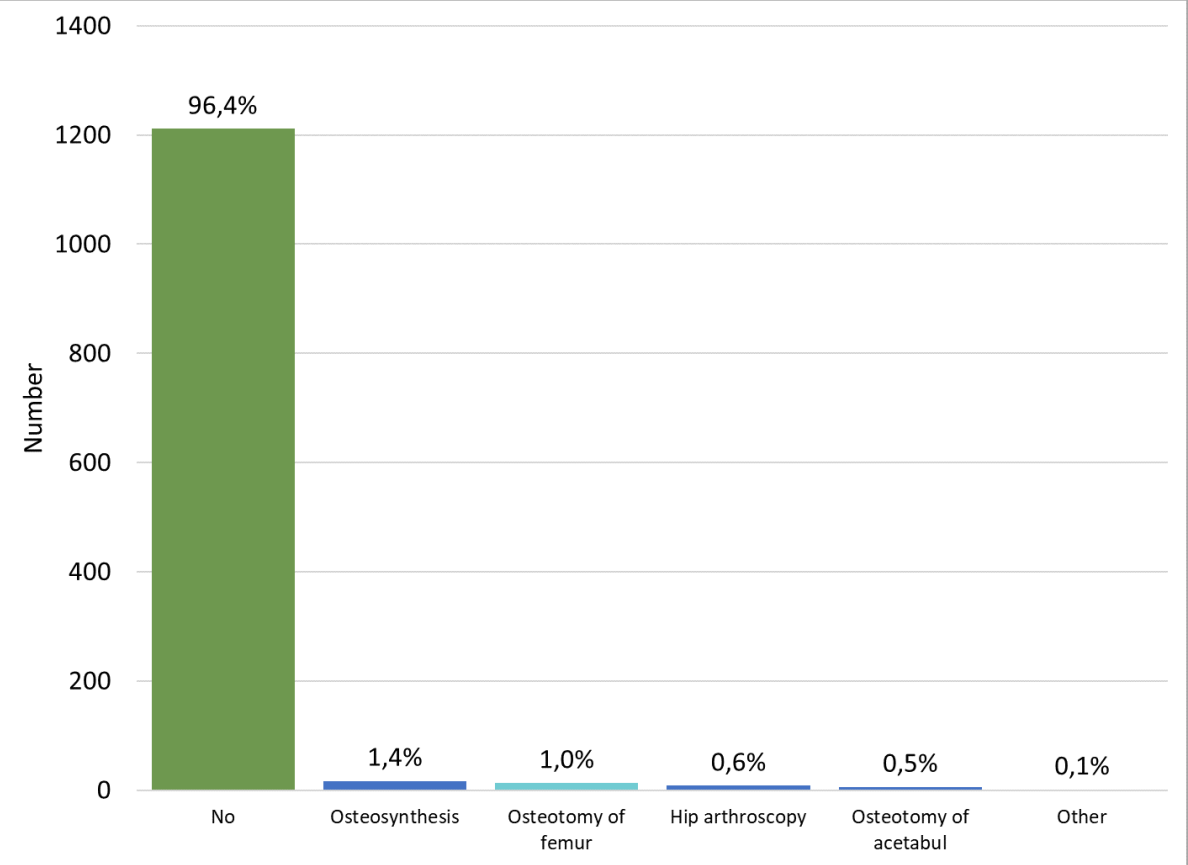


Surgical approach

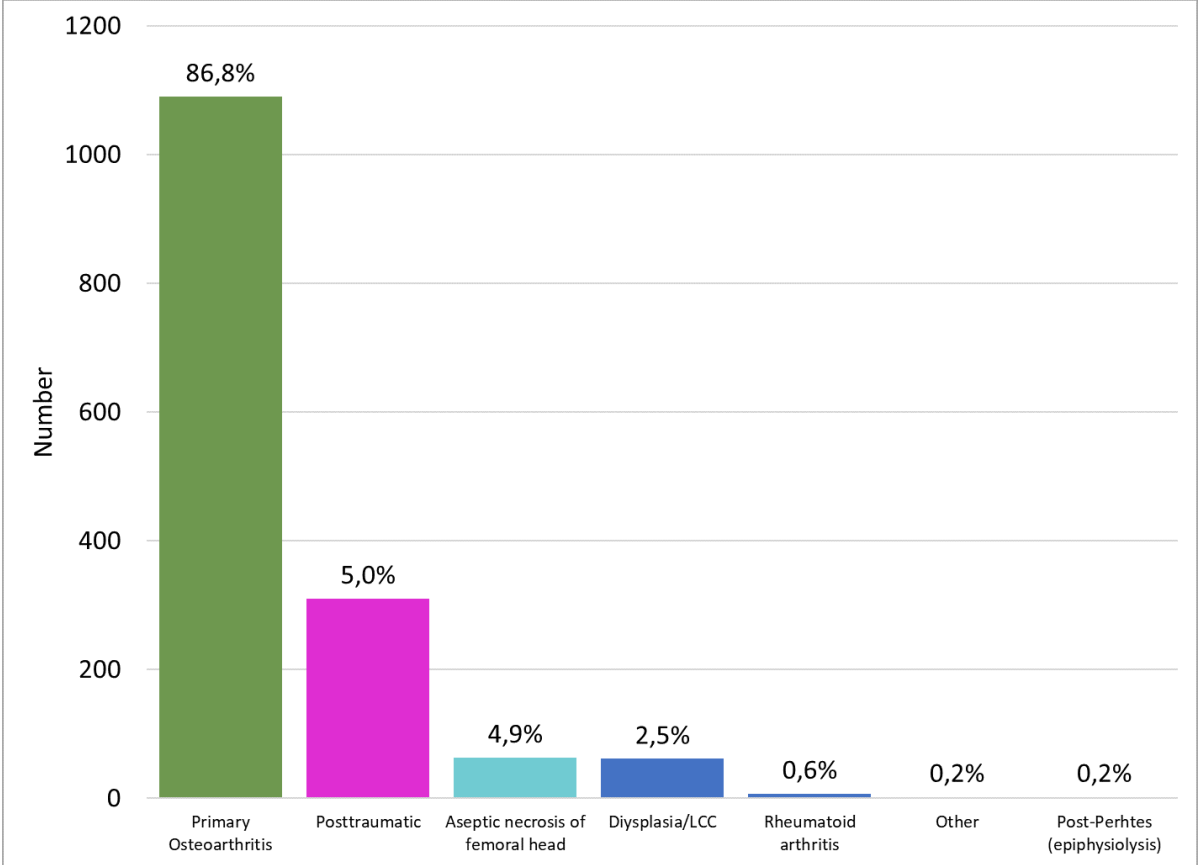


Primary total hip arthroplasty 2024

Previous procedures

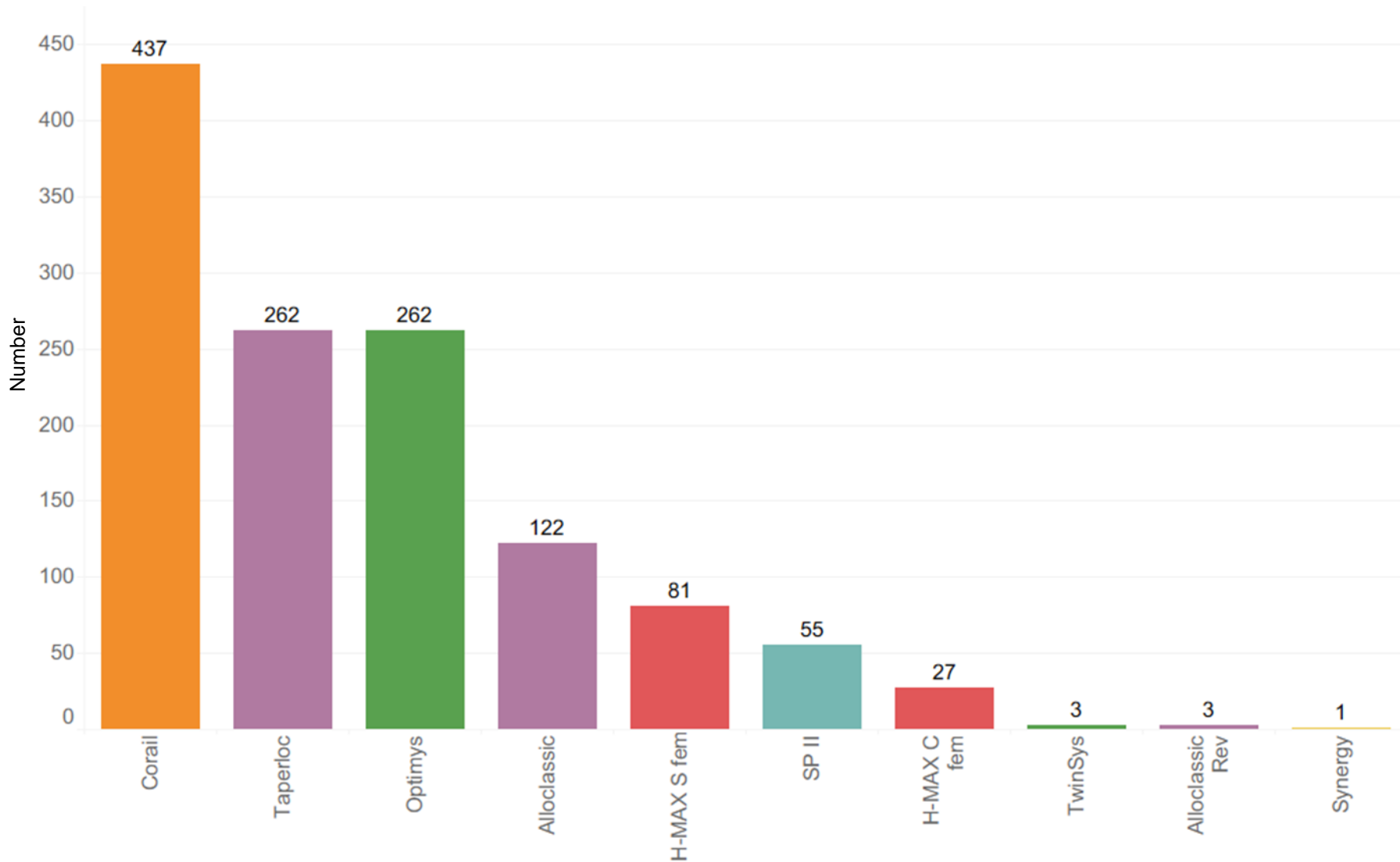


Diagnosis



Primary total hip arthroplasty 2024

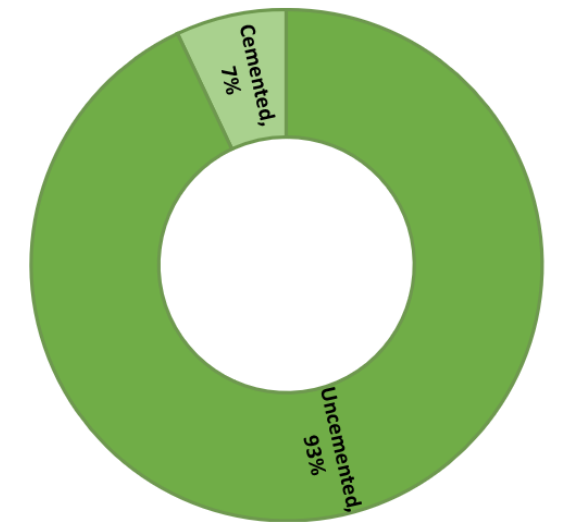
FEMORAL STEM, n=1253 + 3 BHR Resurfacing head S&N



Manufacturer

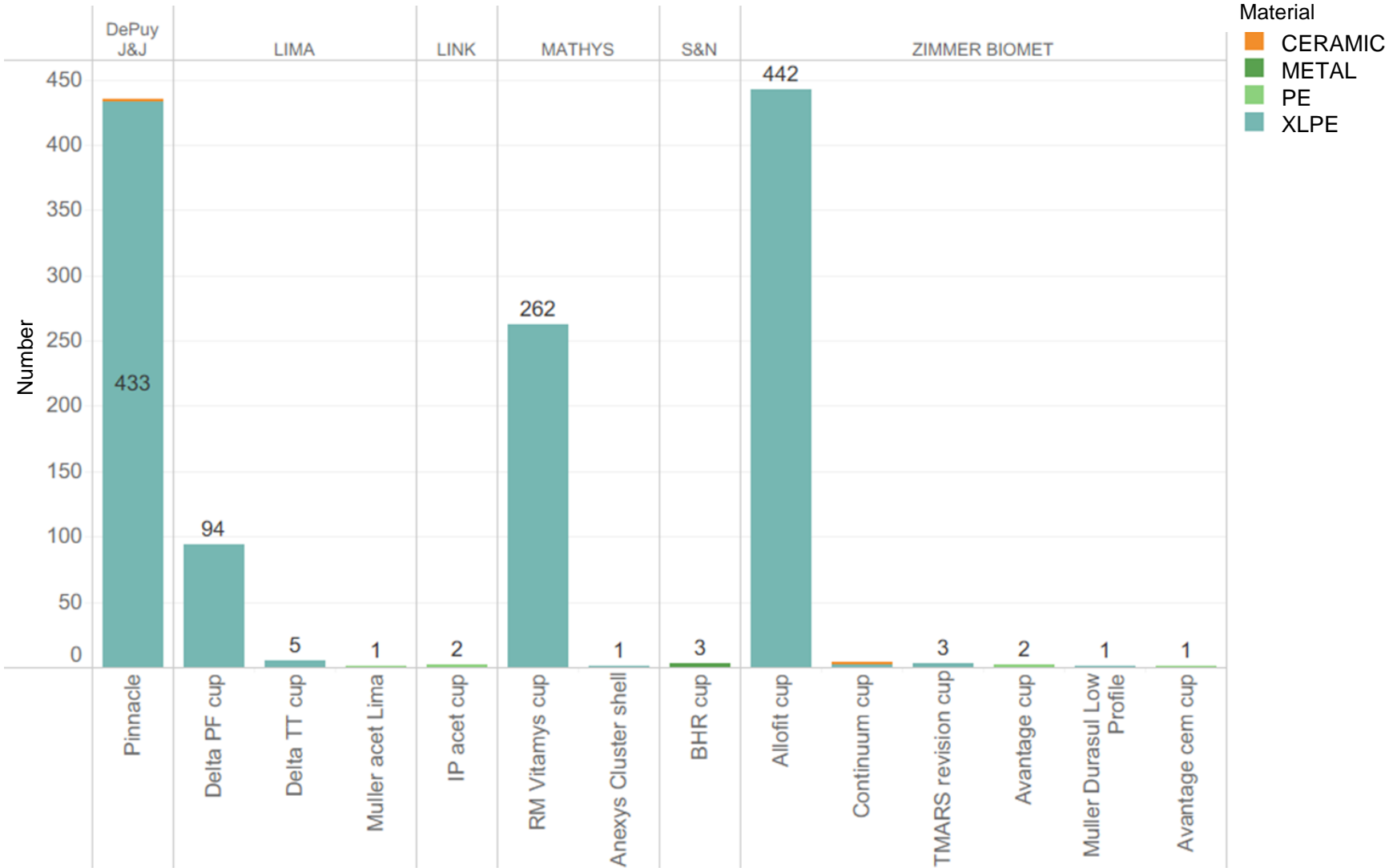
- DePuy J&J
- LIMA
- LINK
- MATHYS
- S&N
- ZIMMER BIOMET

Stem fixation

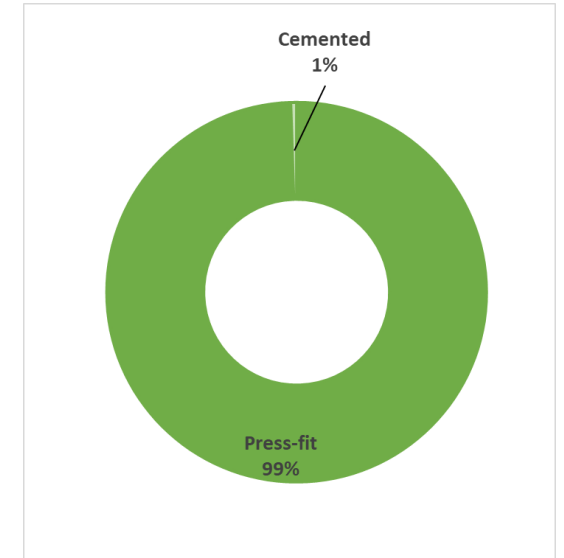


Primary total hip arthroplasty 2024

ACETABULAR PART, n=1256

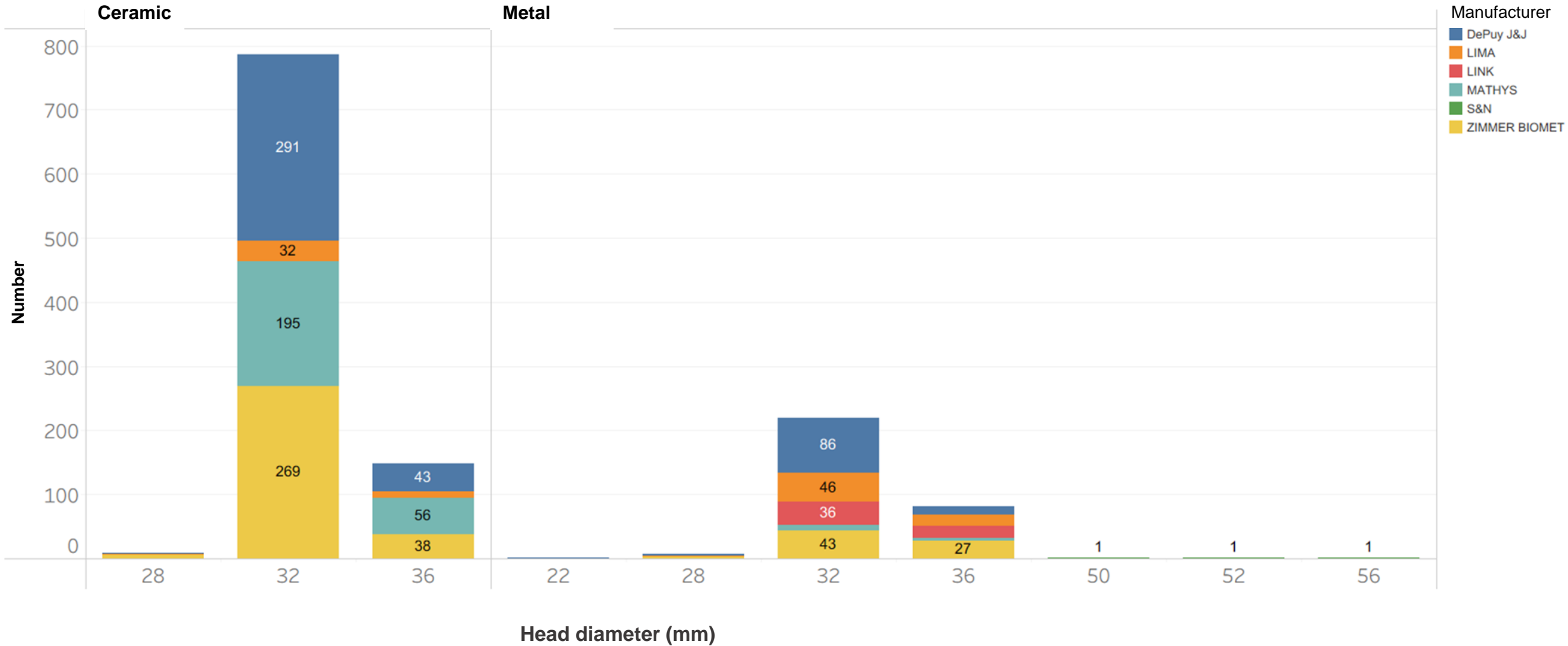


Cup fixation



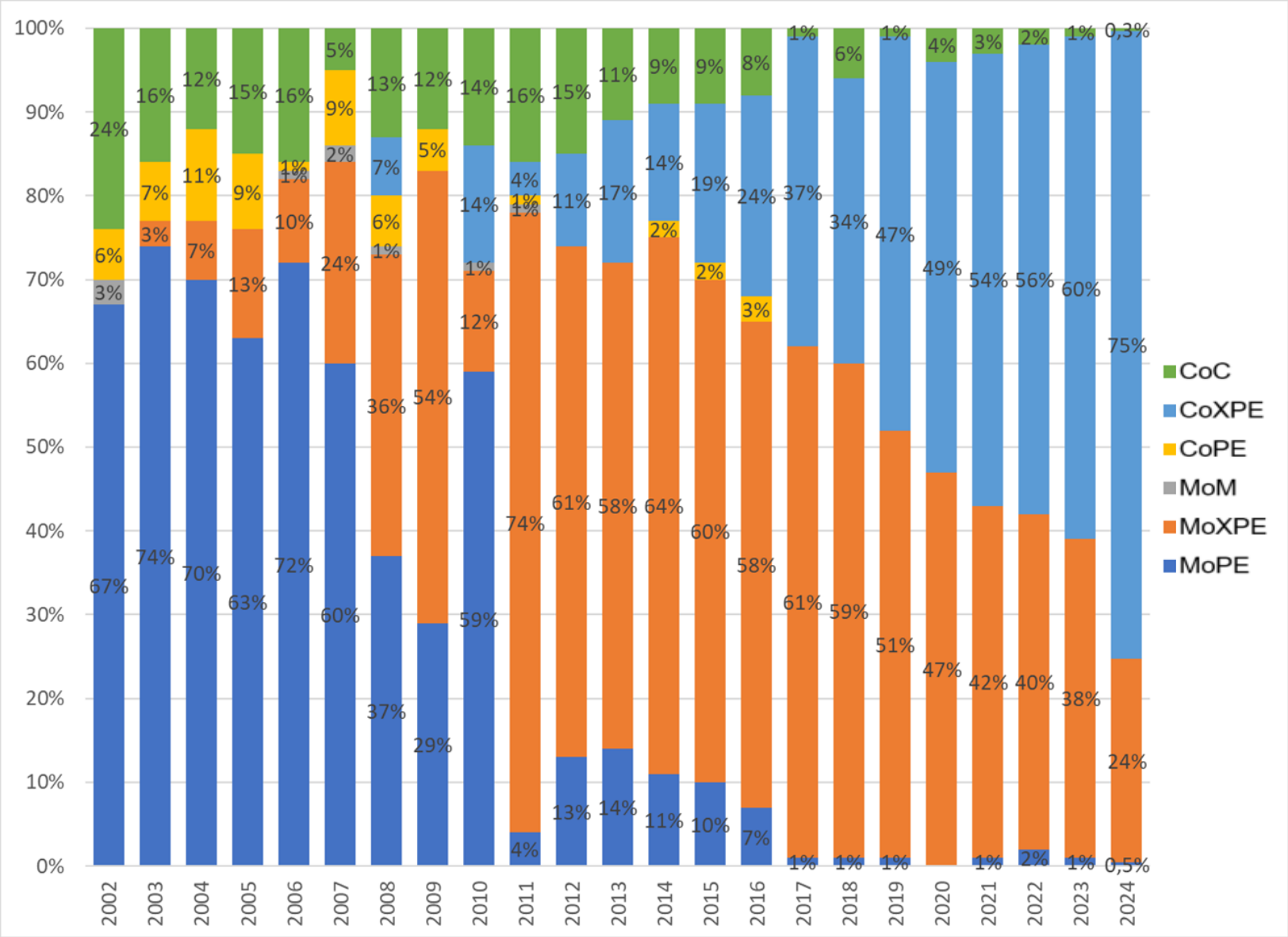
Primary total hip arthroplasty 2024

FEMORAL HEADS, n=1256



Primary total hip arthroplasty 2024

Bearing surface head/acetabular part, 2002-24

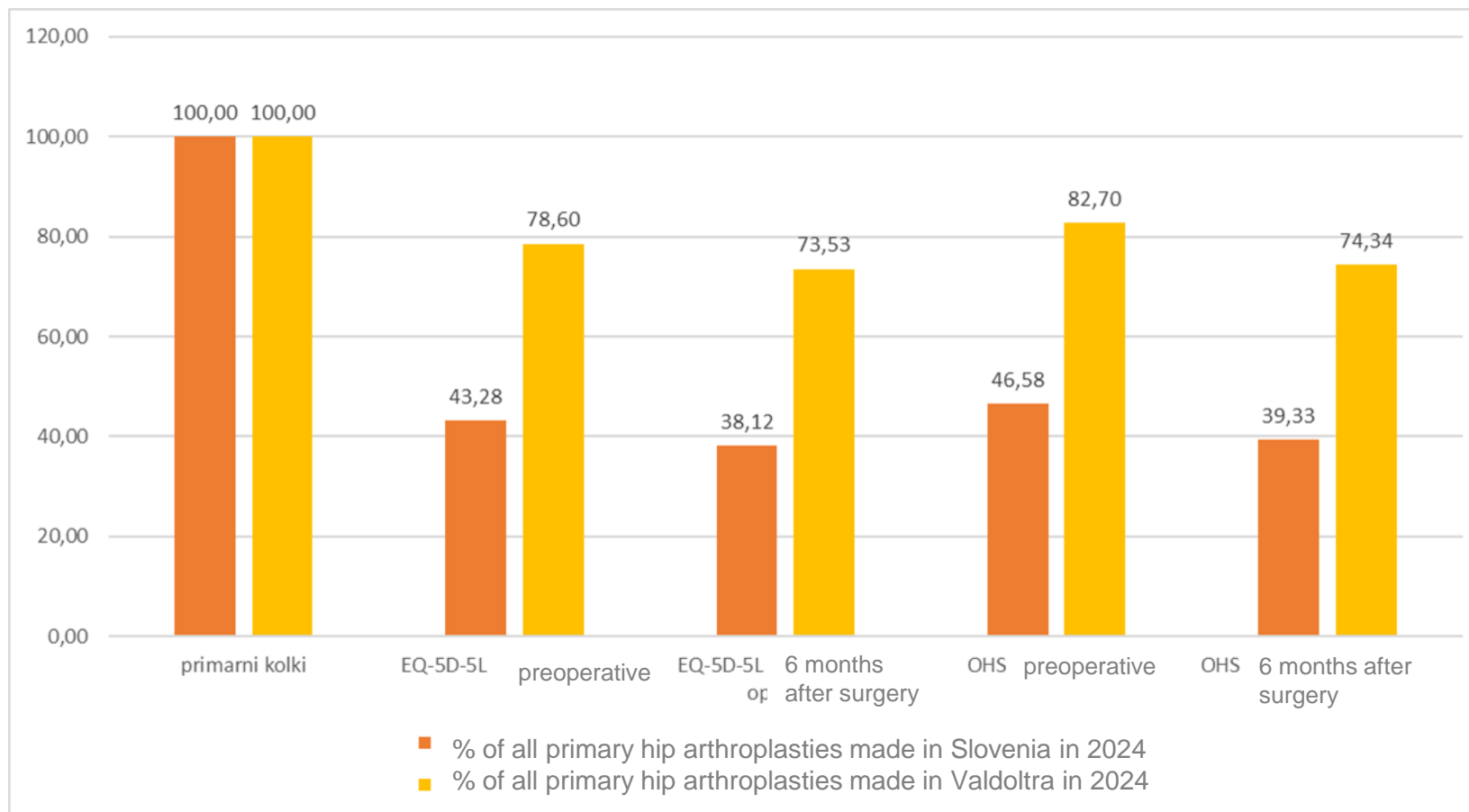


02

PROMs 2024

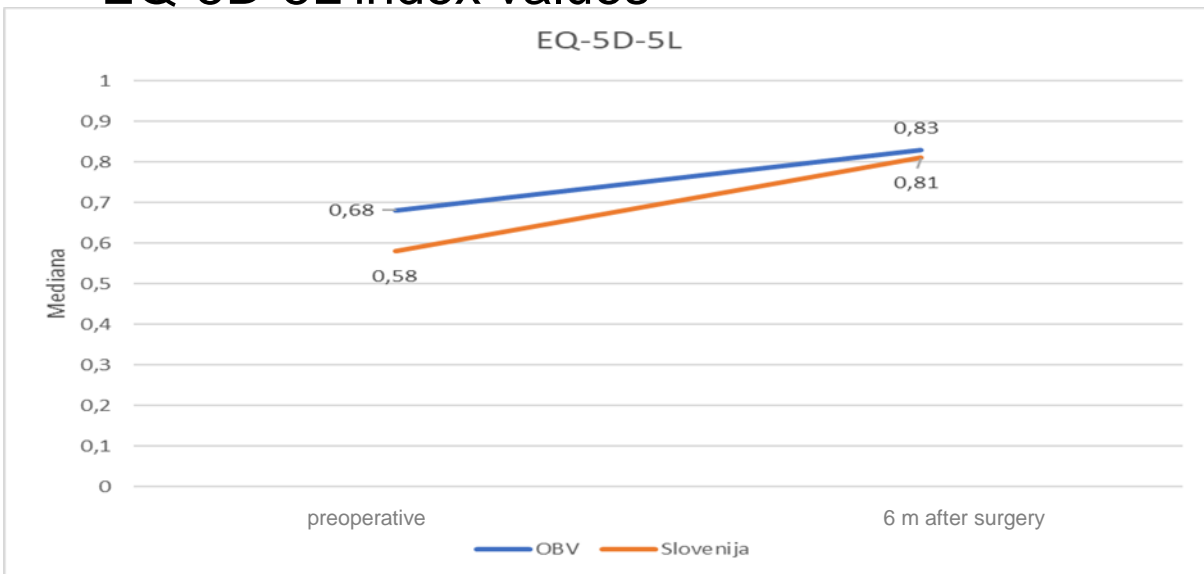
Primary total hip
arthroplasty ,
primary osteoarthritis

% of retrieved EQ-5D-5L and OHS questionnaires

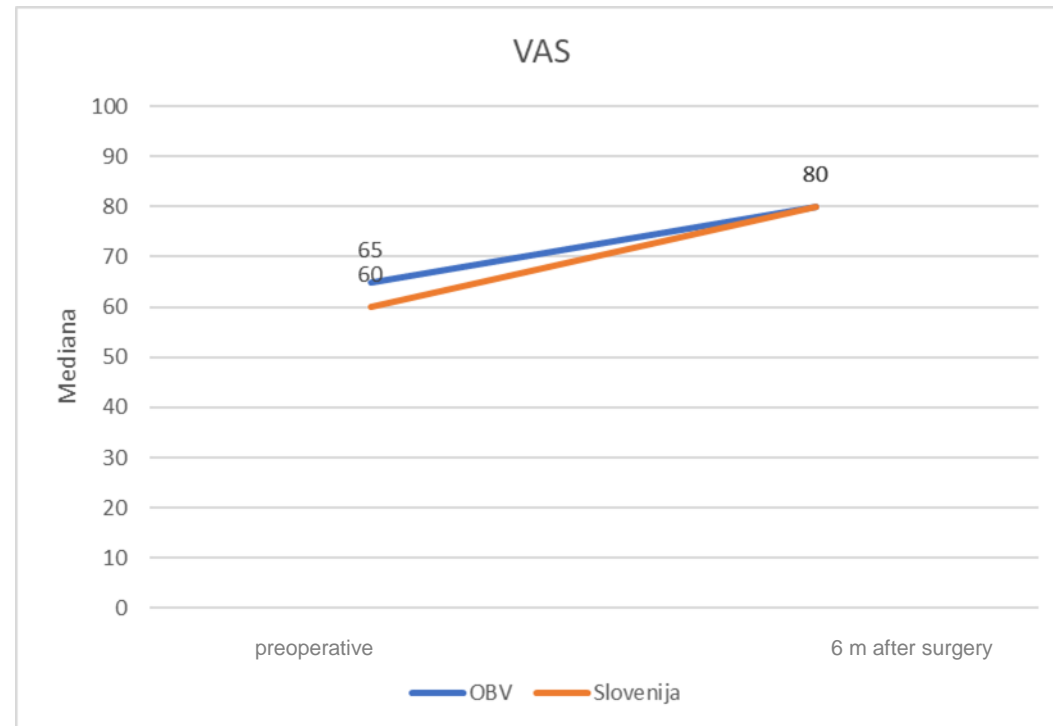


Primary total hip arthroplasty 2024 - OA

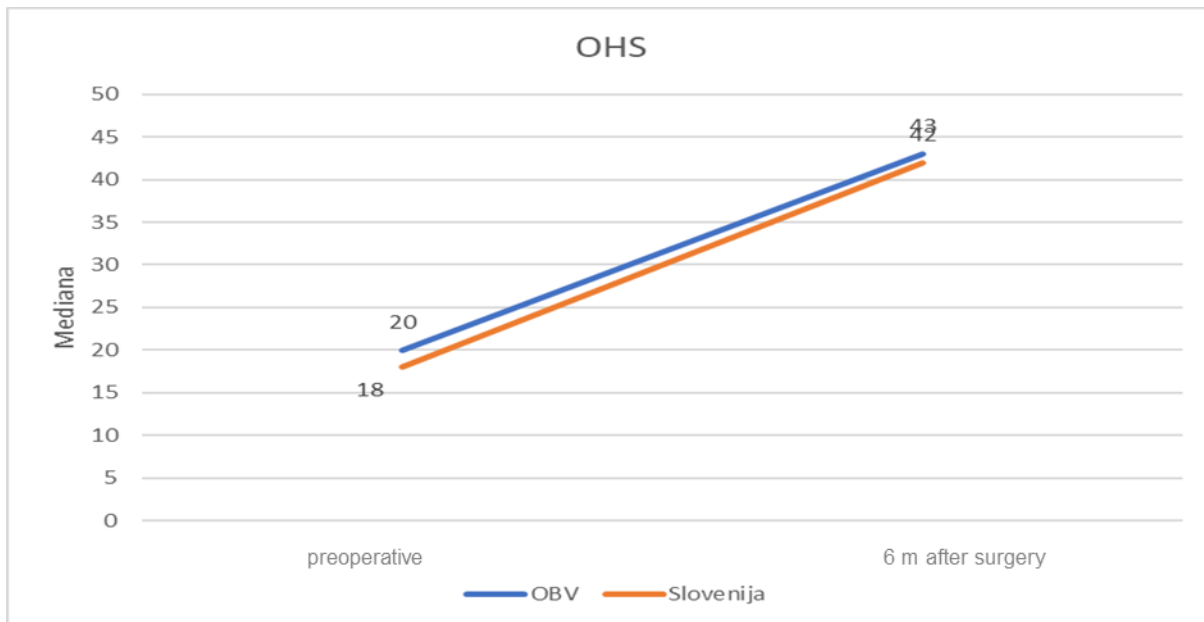
EQ-5D-5L index values



VAS index values



OHS index values



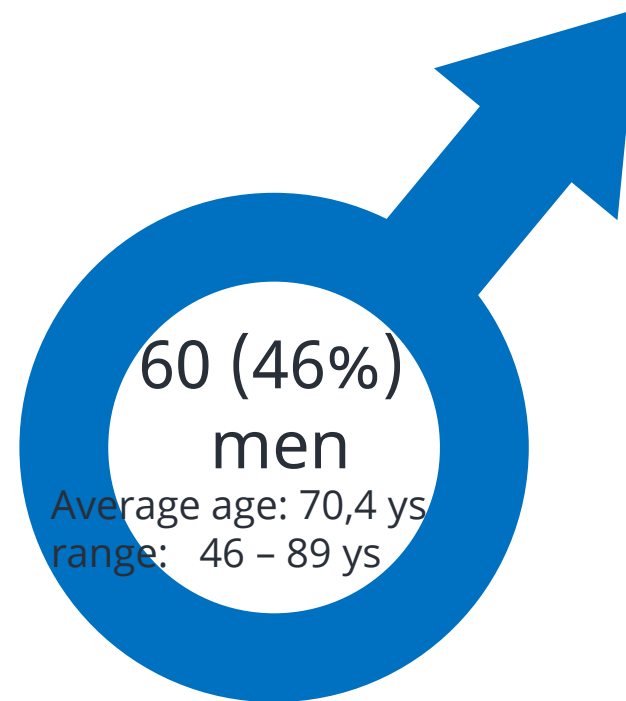
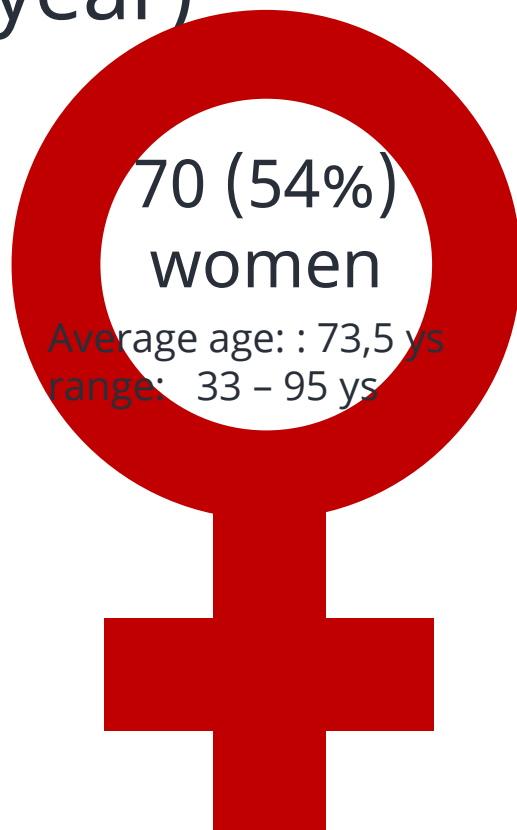
03

REVISIONS OF HIP ARTHROPLASTY 2024

Analysis

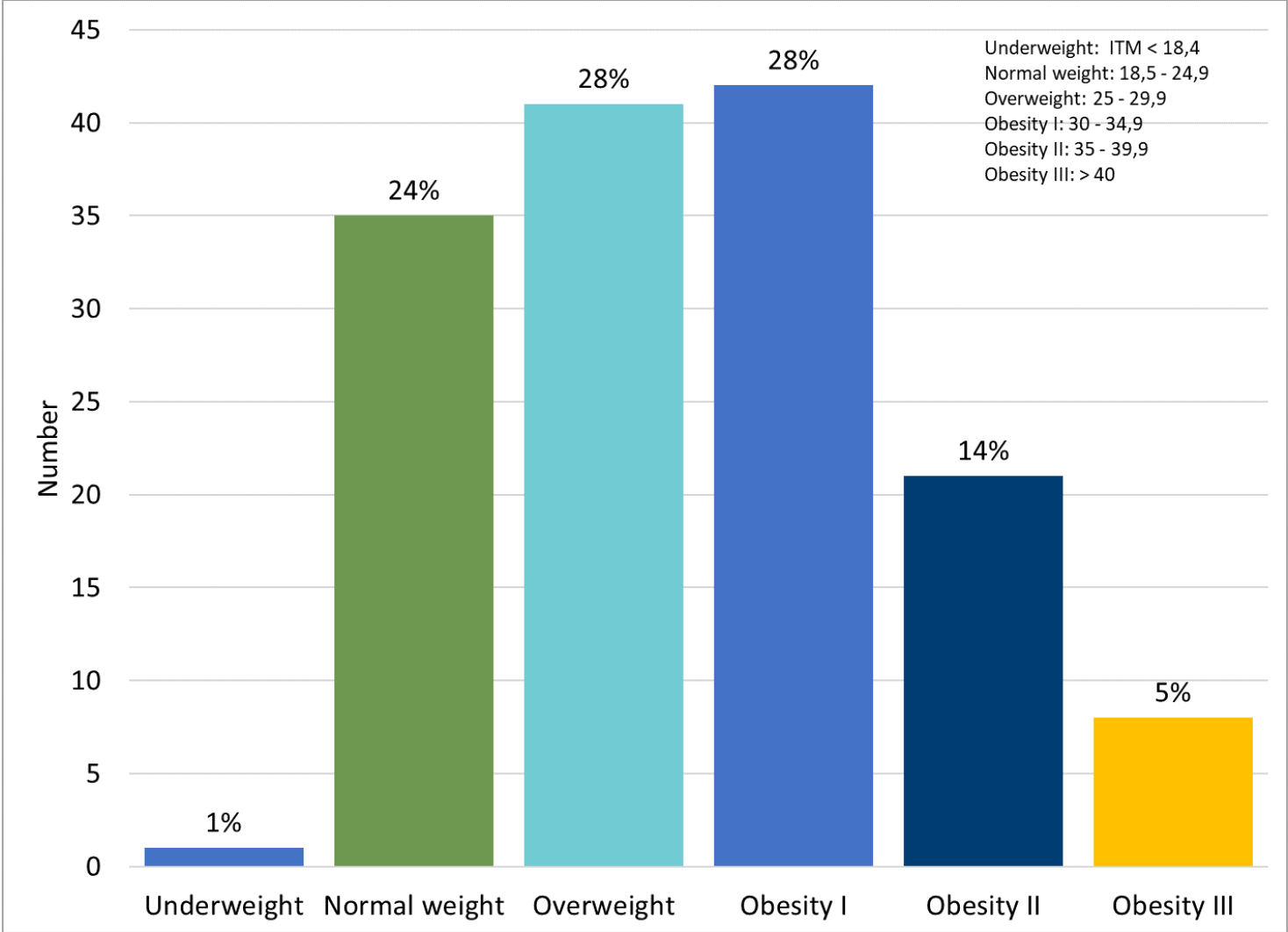
148 revision surgeries

130 patients (14 patients operated 2 times, 2 3 times this year)

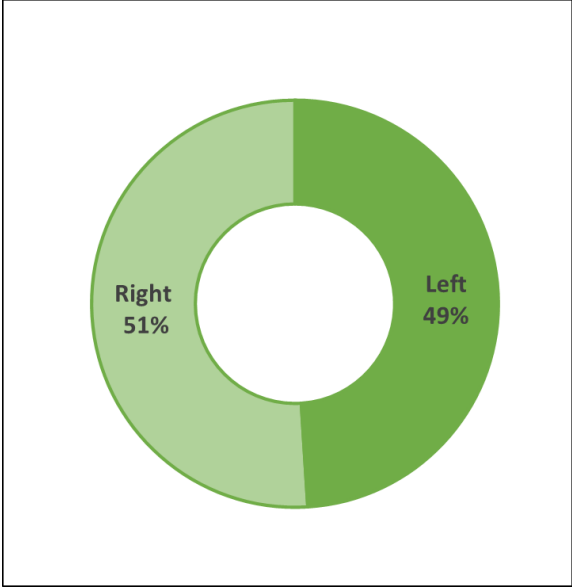


Revisions of hip endoprotheses 2024, N=148

BMI, average: 29.9, range: 16 - 48

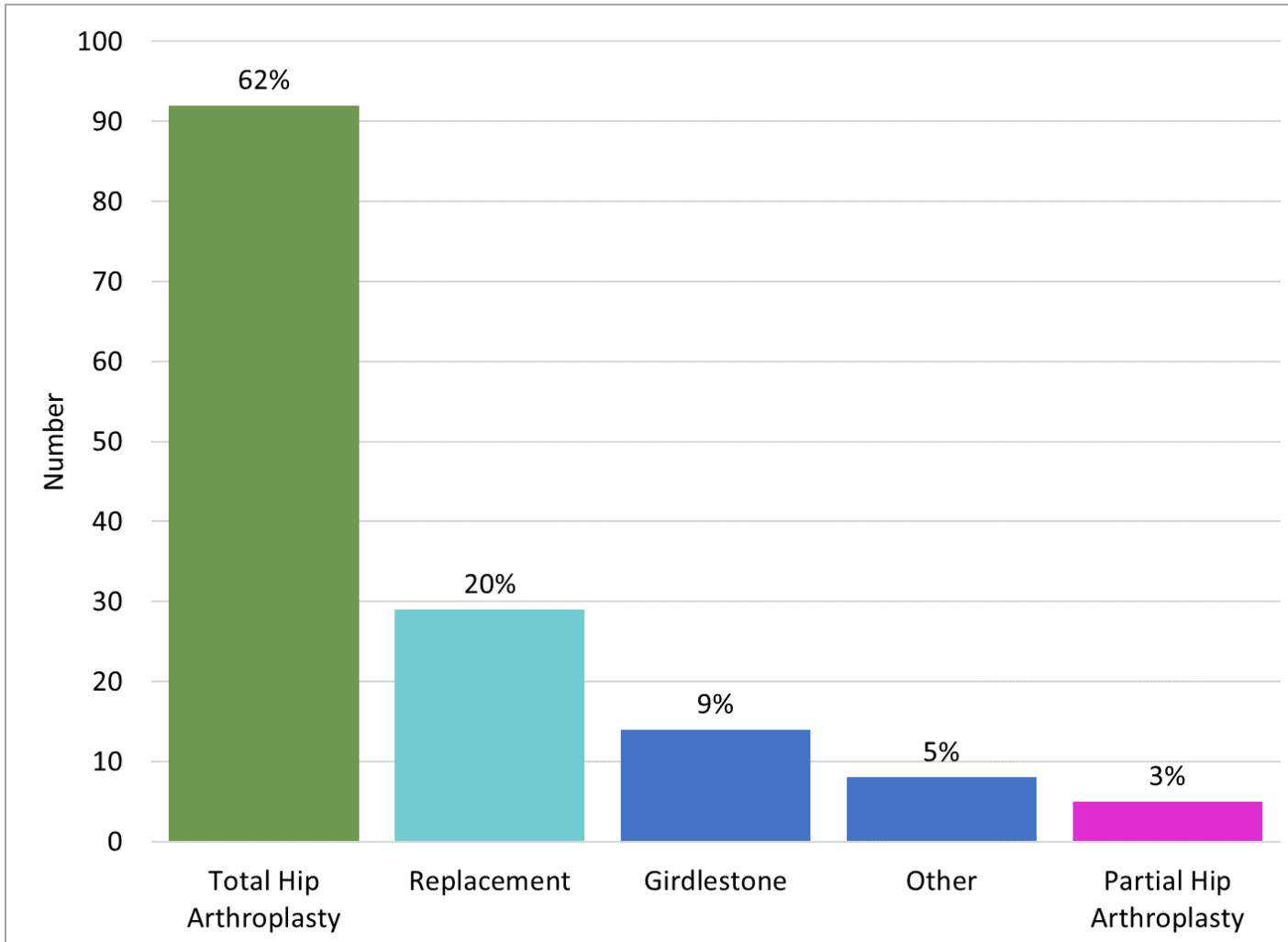


Surgery side

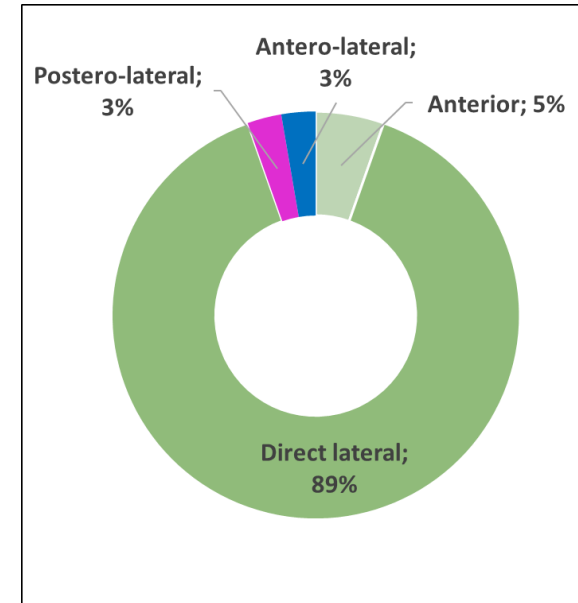


Revisions of hip endoprotheses 2024, N=148

Previous procedures

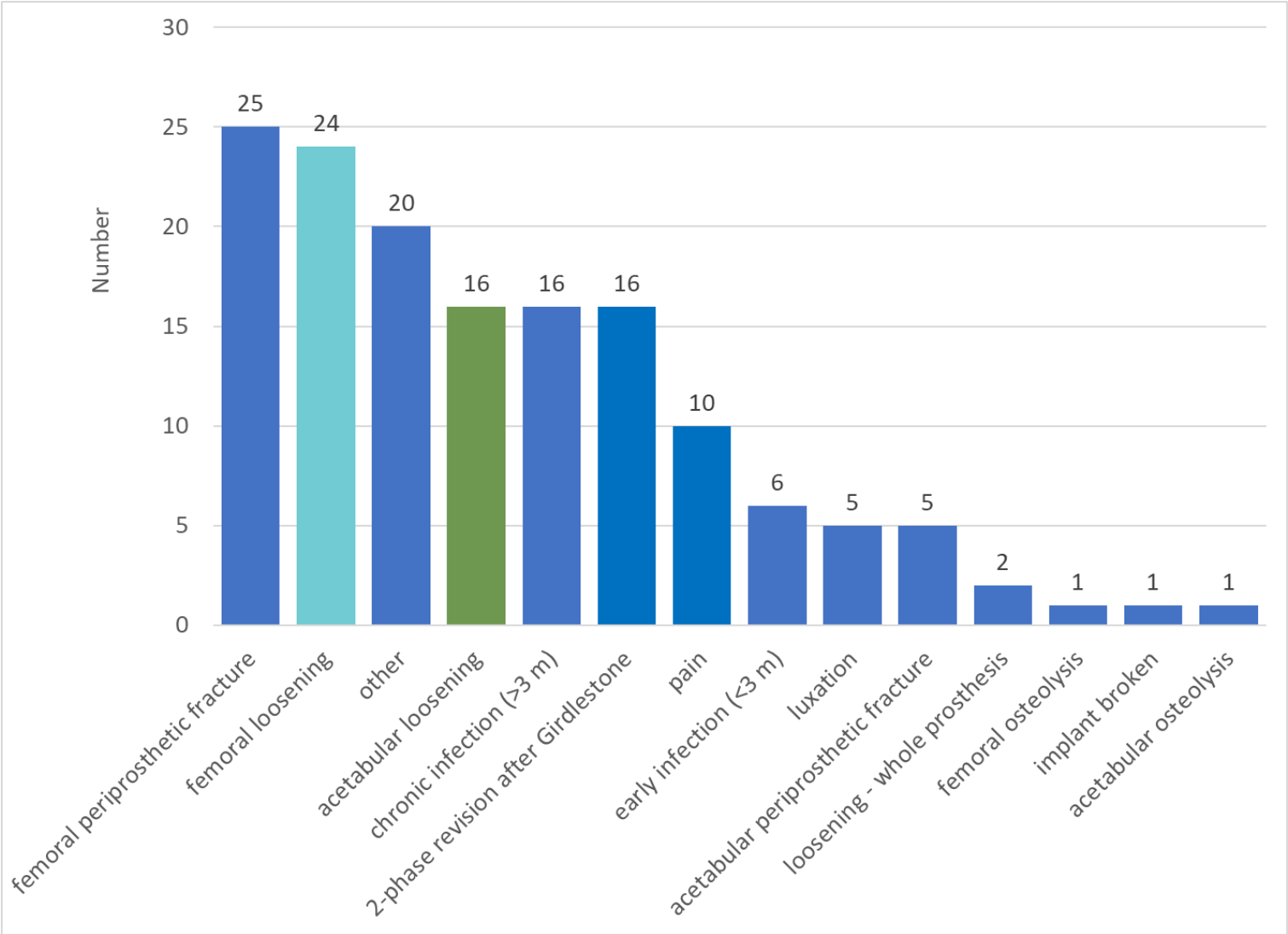


Surgical approach



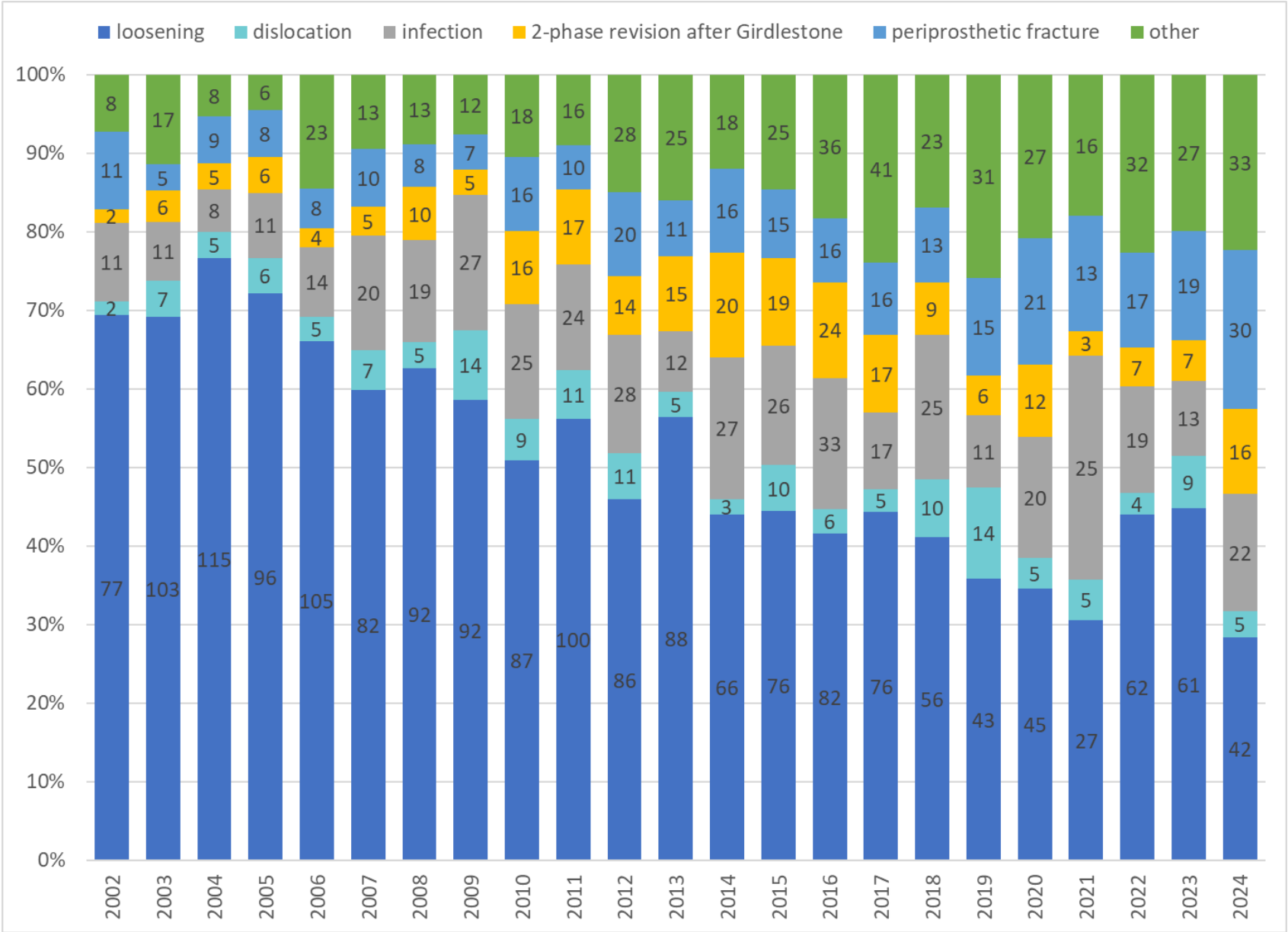
Revisions of hip endoprotheses 2024, N=148

Reasons for revision



Revisions of hip endoprotheses 2024, N=148

Reasons for revision 2002-2024



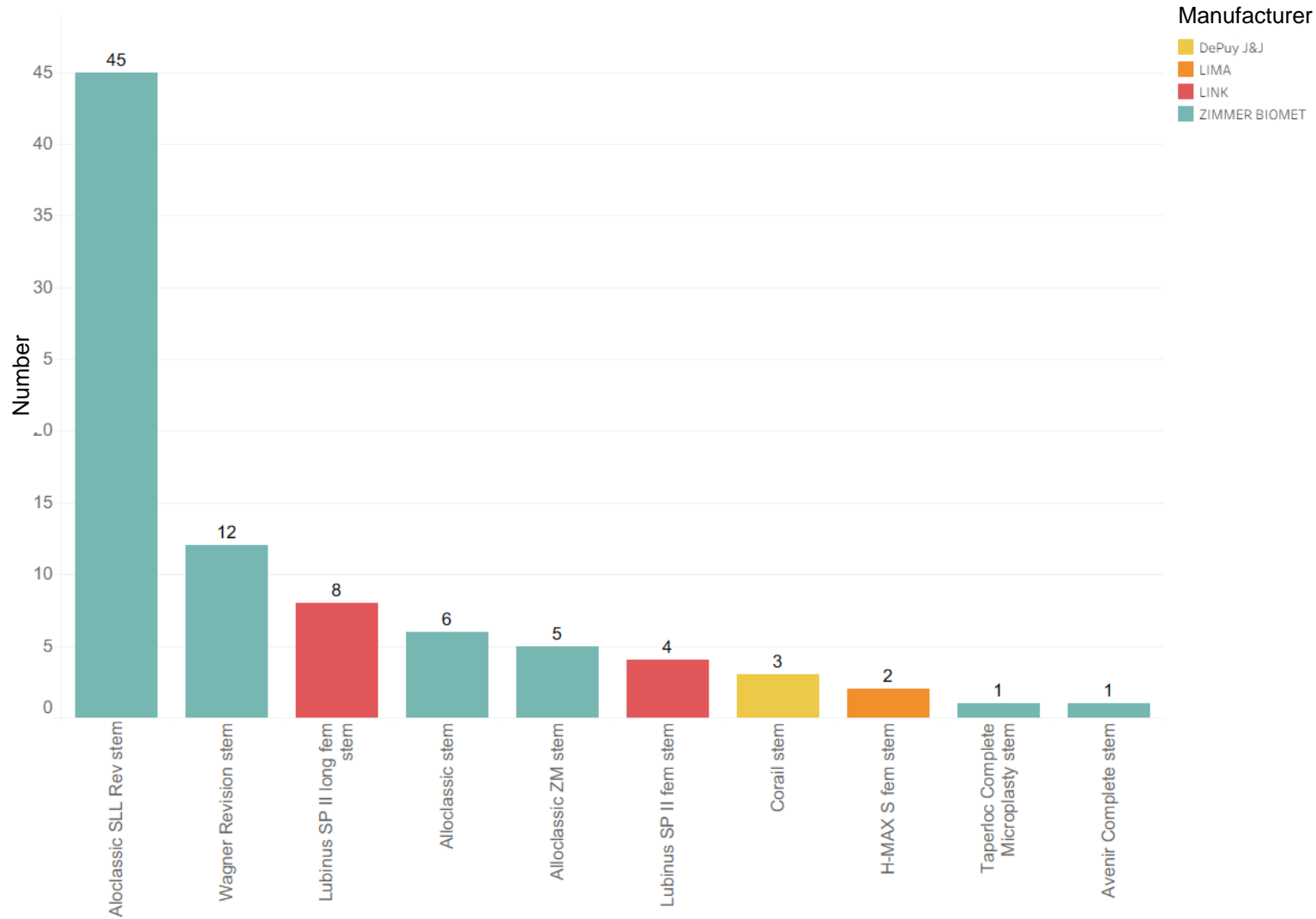
Revisions of hip endoprotheses 2024, N=148

Reasons for revision Hips vs. Knees 2002-2024

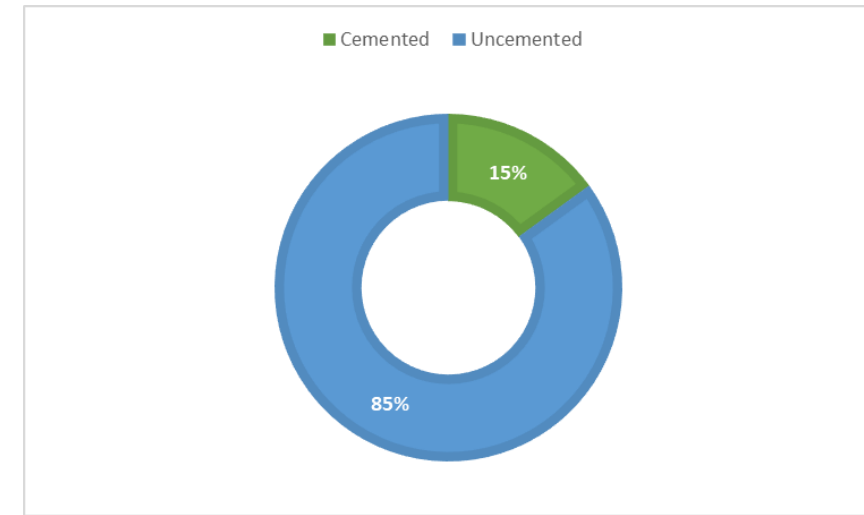
Period 2002 - 2024	Hips (%)	Knees (%)
Deep infection	13,2	25,9
Loosening	51,2	20,9
Instability, malposition, poor mobility	0	14,3
2-stage revision (after Girdlestone)	6,8	12,9
Pain	2,7	7,8
Other	6,5	6,5
OA of other compartment	0	6,3
Periprosthetic fracture	9,4	3,1
Luxation	4,8	1,5
Implant broken	2,8	0,9
Ostolysis	2,2	0
Metallosis	0,3	0

Revisions of hip endoprotheses 2024

Implanted femoral stems, n=87

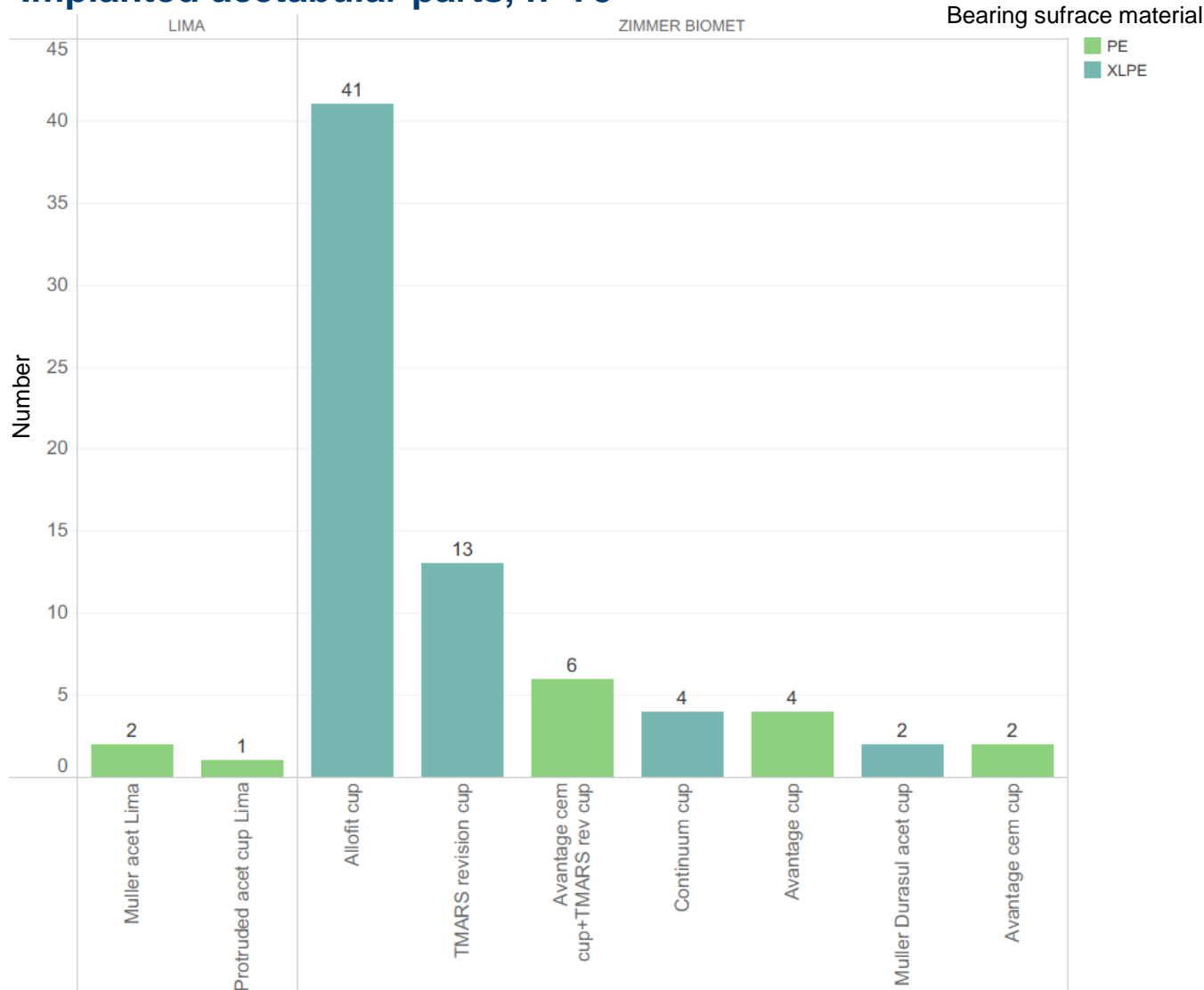


Stems fixation in revisions

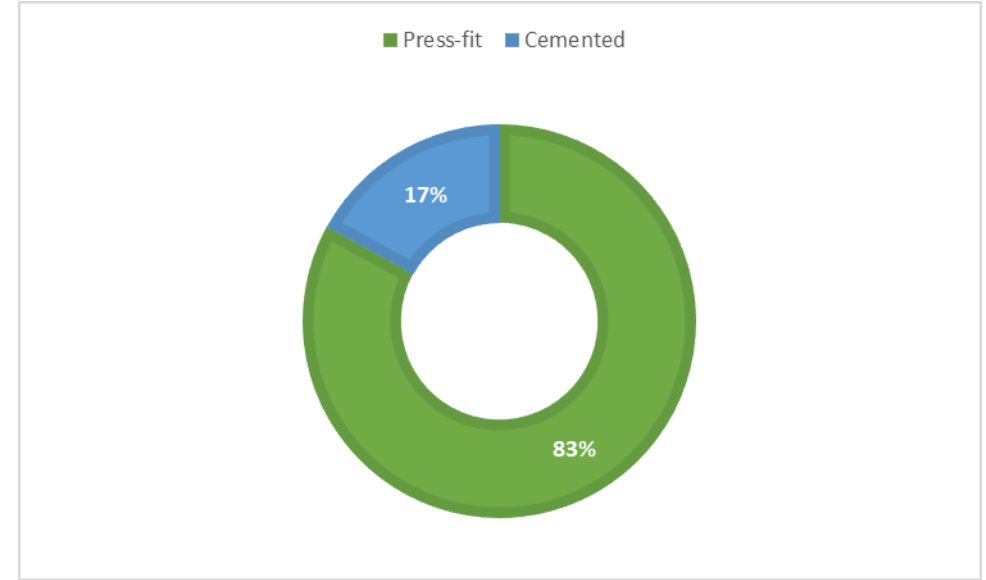


Revisions of hip endoprotheses 2024

Implanted acetabular parts, n=75



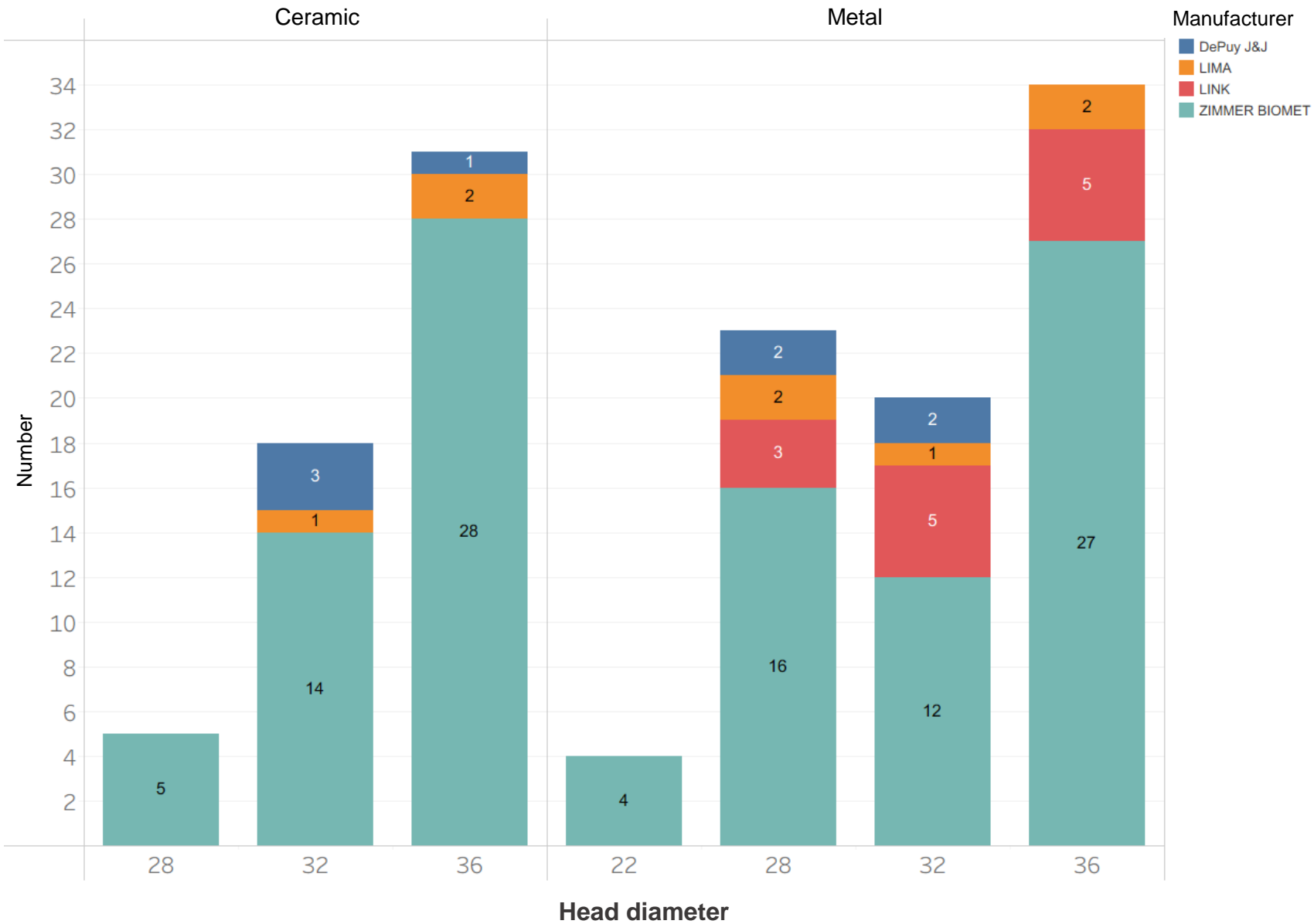
Acetabular fixation in revisions



- 7 added rings:
 - 4 x 3D Metal B-Cage
 - 2 x TMARS
 - 1 x Burch-Schneider

Revisions of hip endoprotheses 2024

Implanted femoral heads, n=135



04

SURVIVAL ANALYSIS 2002-2024

Revisions of hip endoprotheses 2024

Survival table – cumulative percent of revision of **femoral stems** in the period 2002-24, new – used in the last 5 years

Femoral stem	N° of primaries	N° of first revisions	Age <i>Median (IQR)</i>	% of women	Time from primary implantation				
					1 y	5 ys	10 ys	15 ys	20 ys
Alloclassic - ZIMMER BIOMET	6761	107	67 (60-74)	54	0.64 (0.48 - 0.86)	1.14 (0.91 - 1.43)	1.67 (1.36 - 2.06)	2.58 (2.01 - 3.31)	2.58 (2.01 - 3.31)
Avenir cless - ZIMMER BIOMET	333	6	67 (60-74)	65	1.5 (0.63 - 3.57)				
CBH cless - MATHYS	701	25	69 (61-75)	53	0.57 (0.21 - 1.51)	2.31 (1.36 - 3.9)	4.61 (2.99 - 7.08)		
Corail - DePuy J&J	3986	36	65 (58-72)	50	0.38 (0.23 - 0.63)	0.69 (0.45 - 1.05)	1.23 (0.78 - 1.94)	2.33 (1.52 - 3.57)	
H MAX cless - LIMA	668	8	71 (63-77)	56	0.75 (0.31 - 1.79)	1.1 (0.46 - 2.58)	3.11 (1.18 - 8.06)		
SP II - LINK	924	6	79 (75-83)	80	0.23 (0.06 - 0.92)	0.52 (0.19 - 1.39)	0.71 (0.29 - 1.72)	0.71 (0.29 - 1.72)	1.75 (0.52 - 5.85)
Taperloc Complete Microplasty - ZIMMER BIOMET	1277	7	66 (58-72)	53	0.41 (0.17 - 0.98)	0.8 (0.36 - 1.79)			

Only femoral stems, where the N° of implants was at least 300. If the N° at risk was less than 150, the cumulative percent is in italic. If the N° at risk was less than 50, the cumulative percent is not presented.
IQR-Interquartile range

Survival table – cumulative percent of revision of **femoral stems** in the period 2002-24, older then 5 years

Femoral stem	N° of primaries	N° of first revisions	Age <i>Median (IQR)</i>	% of women	Time from primary implantation				
					1 y	5 ys	10 ys	15 ys	20 ys
Profemur Z - WRIGHT	1100	78	63 (55-70)	57	1.37 (0.83 - 2.26)	2.76 (1.94 - 3.92)	4.73 (3.61 - 6.2)	6.9 (5.46 - 8.69)	9.49 (7.46 - 12.02)
Versys - ZIMMER BIOMET	1015	40	68 (60-73)	59	0.49 (0.21 - 1.18)	1.52 (0.92 - 2.5)	2.77 (1.89 - 4.05)	3.59 (2.54 - 5.05)	4.95 (3.59 - 6.8)
SL-PLUS - S&N	2660	140	68 (60-73)	61	0.57 (0.34 - 0.94)	1.77 (1.33 - 2.36)	3.07 (2.46 - 3.83)	5.63 (4.74 - 6.69)	6.88 (5.78 - 8.17)

Only femoral stems, where the N° of implants was at least 300. If the N° at risk was less than 150, the cumulative percent is in italic. If the N° at risk was less than 50, the cumulative percent is not presented.
IQR-Interquartile range

Revisions of hip endoprotheses 2024

Survival table – cumulative percent of revision of acetabular parts in the period 2002-24, new – used in the last 5 years

Acetabular part	N° of primaries	N° of first revisions	Age Median (IQR)	% of women	Time from primary implantation				
					1 y	5 ys	10 ys	15 ys	20 ys
Allofit - ZIMMER BIOMET	9379	101	68 (60 - 74)	56	0.51 (0.38 - 0.68)	0.88 (0.7 - 1.1)	1.25 (1.01 - 1.54)	1.57 (1.23 - 2)	<i>1.68 (1.3 - 2.18)</i>
Delta PF - LIMA	943	11	69 (61 - 76)	56	0.44 (0.17 - 1.18)	0.6 (0.25 - 1.46)	1.68 (0.83 - 3.38)	<i>2.71 (1.34 - 5.43)</i>	
IP - LINK	372	3	80 (77 - 83)	81	0.27 (0.04 - 1.93)	0.87 (0.28 - 2.67)	0.87 (0.28 - 2.67)	<i>0.87 (0.28 - 2.67)</i>	<i>0.87 (0.28 - 2.67)</i>
Pinnacle - DePuy J&J	3960	19	66 (58 - 72)	49	0.1 (0.04 - 0.28)	0.5 (0.29 - 0.85)	0.79 (0.46 - 1.37)	<i>1.19 (0.66 - 2.16)</i>	
Muller cem - LIMA	338	22	78 (73 - 81)	77	0.31 (0.04 - 2.15)	1.36 (0.51 - 3.59)	4.80 (2.73 - 8.36)		
RM Vitamys - MATHYS	686	1	68 (61 - 75)	52	0.15 (0.02 - 1.04)	<i>0.15 (0.02 - 1.04)</i>			

Only the acetabular parts, where the N° of implants was at least 300. If the N° at risk was less than 150, the cumulative percent is in italic. If the N° at risk was less than 50, the cumulative percent is not presented.
IQR-Interquartile range

Survival table – cumulative percent of revision of acetabular parts in the period 2002-24, older than 5 years

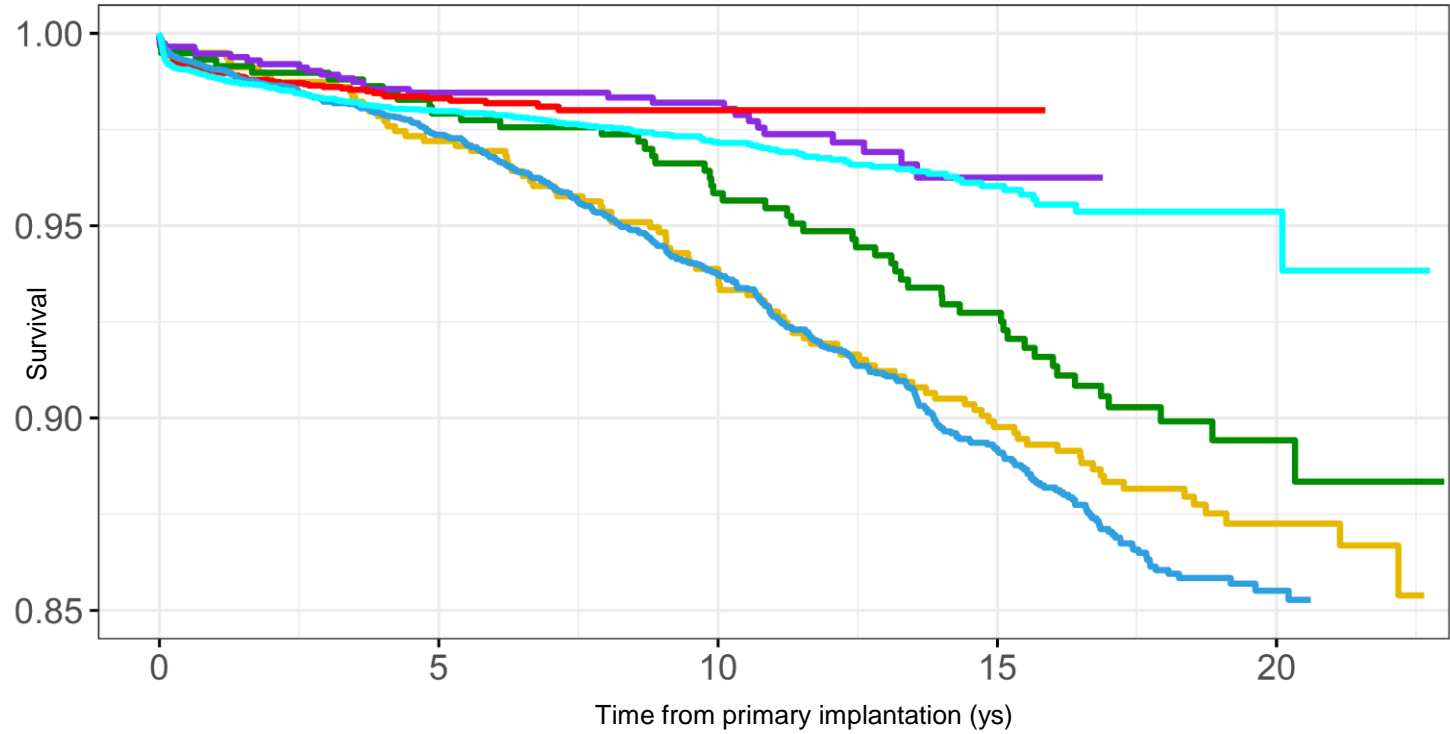
Acetabular part	N° of primaries	N° of first revisions	Age Median (IQR)	% of women	Time from primary implantation				
					1 y	5 ys	10 ys	15 ys	20 ys
Duraloc - DePuy J&J	396	15	67 (59 - 72)	59	0.25 (0.04 - 1.78)	0.78 (0.25 - 2.39)	1.67 (0.75 - 3.68)	3.61 (2.06 - 6.3)	
EHS E - WRIGHT	318	51	63 (55 - 69)	52	0	1.6 (0.67 - 3.81)	8.74 (6.03 - 12.58)	14.17 (10.58 - 18.85)	
CFP - LINK	434	31	67 (62 - 71)	62	0.46 (0.12 - 1.84)	1.89 (0.95 - 3.74)	4.27 (2.67 - 6.78)	7.09 (4.87 - 10.28)	<i>9.04 (6.29 - 12.91)</i>
Doets - S&N	519	84	70 (66 - 74)	58	0.58 (0.19 - 1.8)	2.4 (1.37 - 4.19)	10.37 (7.89 - 13.58)	18.54 (15.01 - 22.78)	<i>23.07 (18.7 - 28.27)</i>
Triology AB - ZIMMER BIOMET	325	21	57 (49 - 62)	44	0.62 (0.15 - 2.44)	1.86 (0.84 - 4.08)	3.14 (1.7 - 5.75)	6.54 (4.27 - 9.97)	<i>6.99 (4.6 - 10.54)</i>
Triology - ZIMMER BIOMET	1416	44	68 (62 - 73)	56	0.28 (0.11 - 0.75)	0.43 (0.19 - 0.96)	1.5 (0.96 - 2.34)	2.95 (2.1 - 4.14)	4.21 (3.09 - 5.71)
Bicon - S&N	650	62	66 (57 - 72)	69	0.92 (0.42 - 2.05)	2.19 (1.3 - 3.67)	5.14 (3.64 - 7.23)	8.75 (6.67 - 11.44)	11.77 (9.14 - 15.09)

Only the acetabular parts, where the N° of implants was at least 300. If the N° at risk was less than 150, the cumulative percent is in italic. If the N° at risk was less than 50, the cumulative percent is not presented.
IQR-Interquartile range

Revisions of hip endoprotheses 2024

Head-liner bearings – survival curve

■ ALUoALU ■ DELTAoDELTA ■ MoPE
■ ALUoPE ■ DELTAoXPE ■ MoXPE



Number at risk

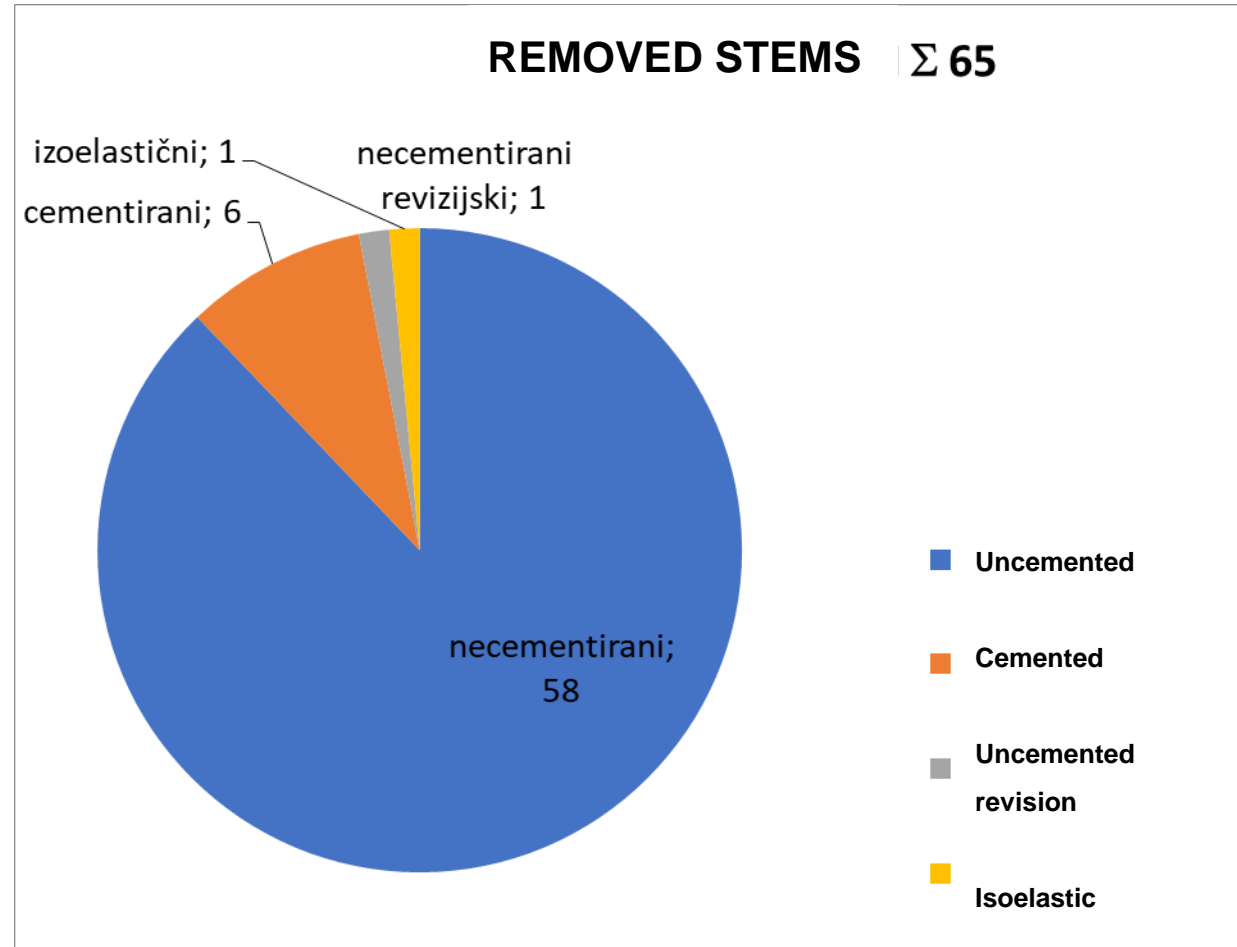
ALUoALU	792	754	684	600	234
ALUoPE	587	552	497	412	111
DELTAoDELTA	1135	989	641	168	0
DELTAoXPE	5210	1791	368	6	0
MoPE	4828	4216	3094	1688	404
MoXPE	8988	6148	3291	948	70

05

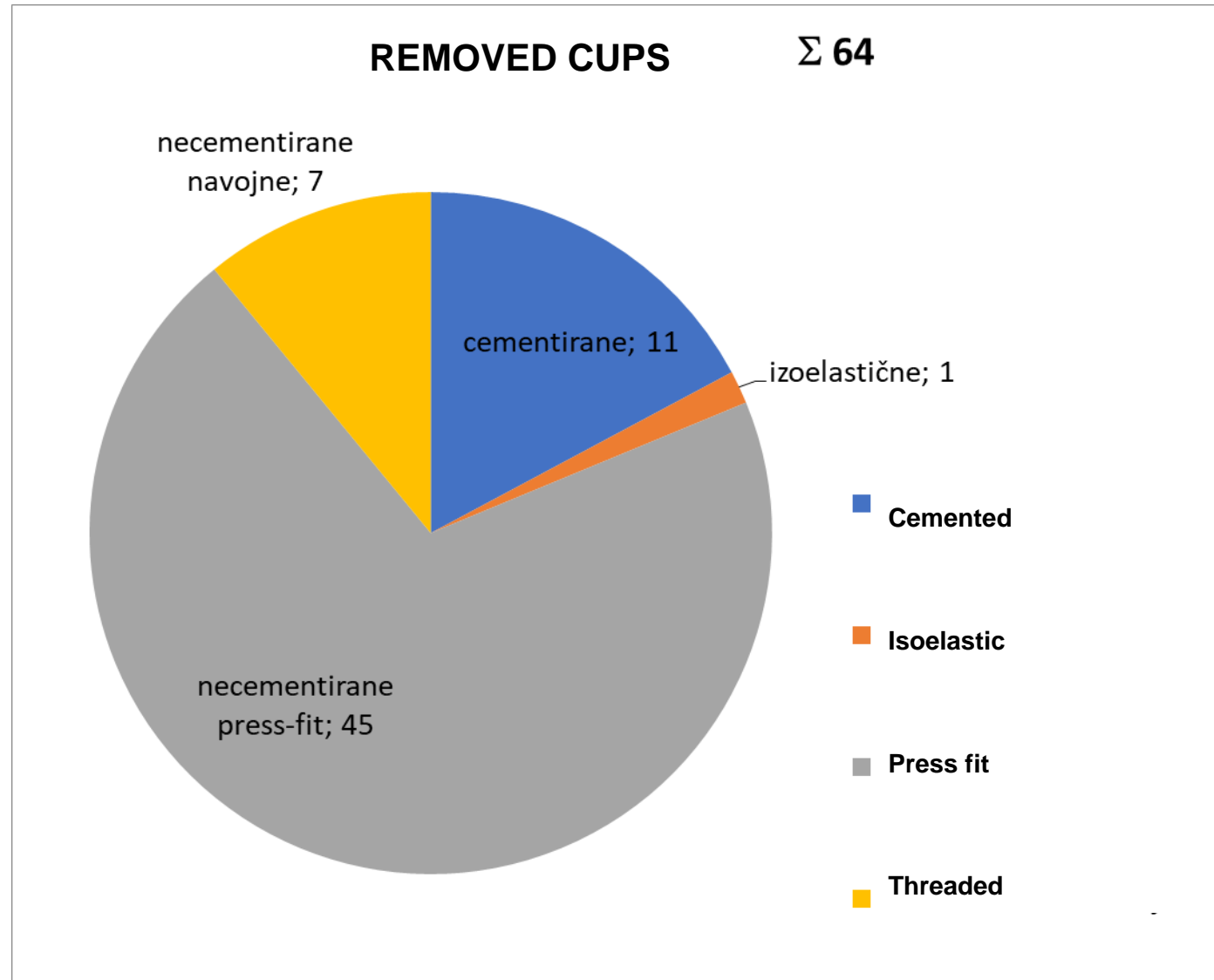
REVISION OPERATIONS 2024

Implant retrieval program

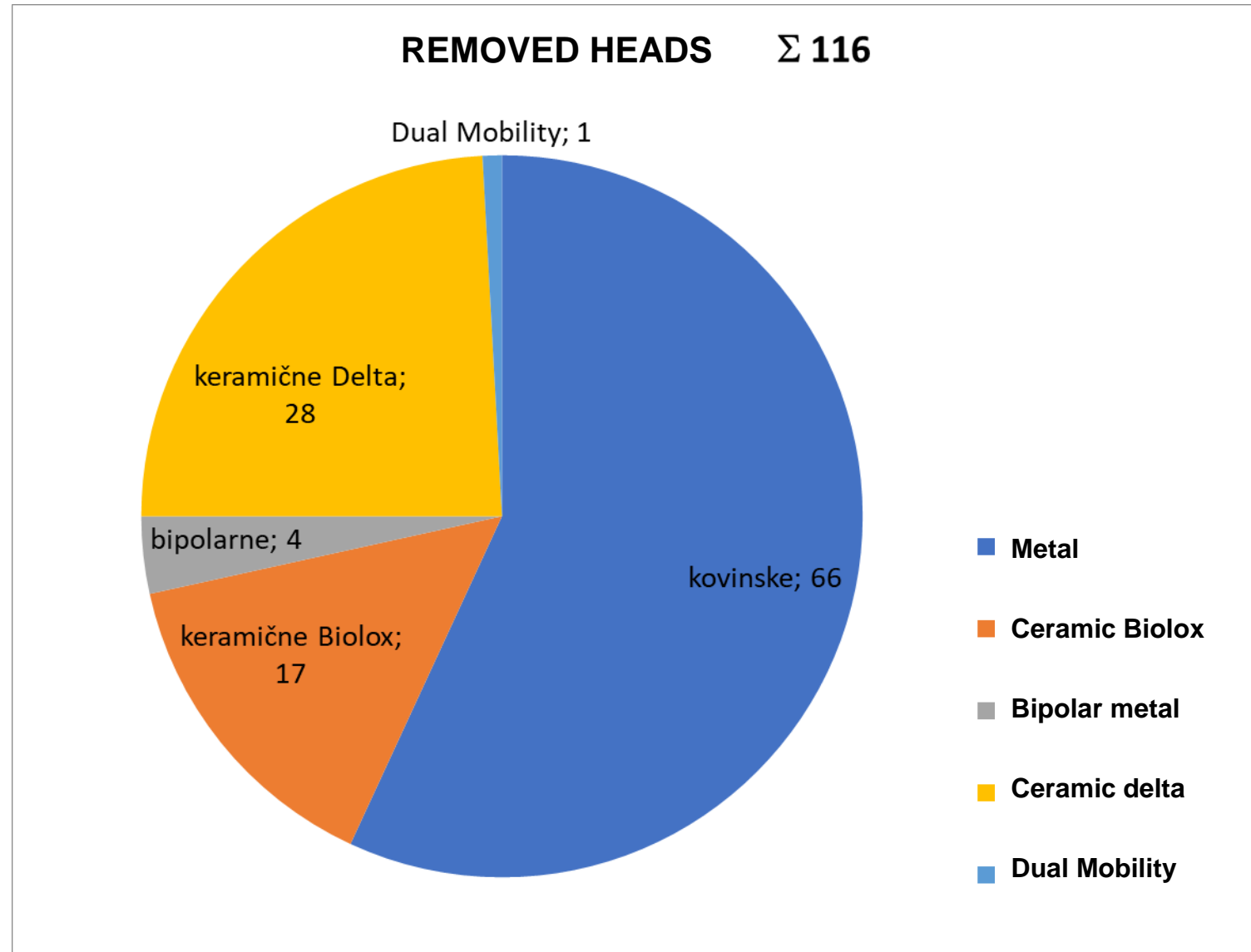
Removed and collected femoral components in 2024 (N= 65)

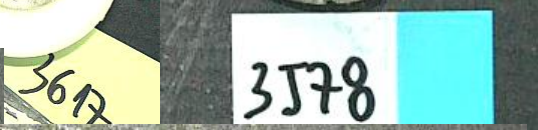
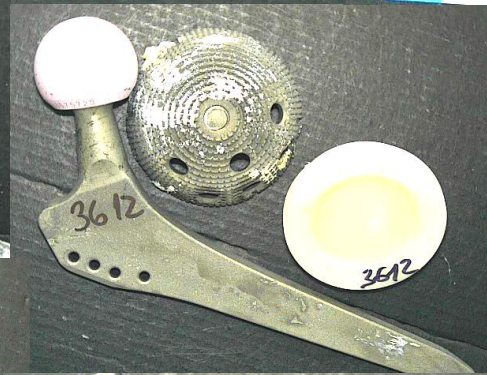
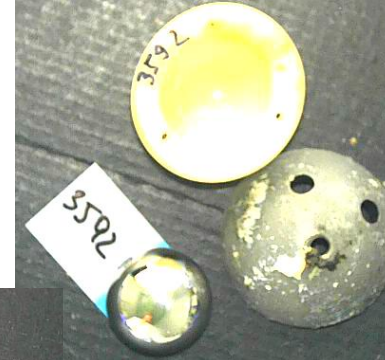


Removed and collected acetabular components in 2024 (n=64)



Removed and collected femoral head components 2024 (N=116)





Removed stems – time in situ 2009-2024 (collected)

Charnley-Mueller stems (N=60) (2009-2024)	23,8 ± 7,2 ys (10,8 – 41,1)
izoelastic stems (N=175) (2009-2026)	16,4 ± 5,1 ys (5,1 – 34,2)
straight SL cem. stems (N=168) (2009-2019)	13,0 ± 6,5 ys (0,5 – 36,4)
SL-Plus ZM stems (N=179) (2009-2022)	10,0 ± 6 ys (0 – 27,4)
Profemur stems (N=77) (2009-2022)	7,3 ± 4,8 ys (0,1 – 17,5)

Endoprostheses with the longest time in situ

Profemur Z
(17,5 l)



rev. SL-Plus
27,4



SL Lima
(36,4 l)



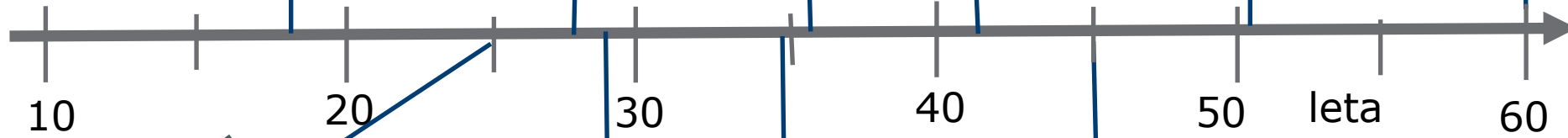
ALIVIUM
(41.1 l)



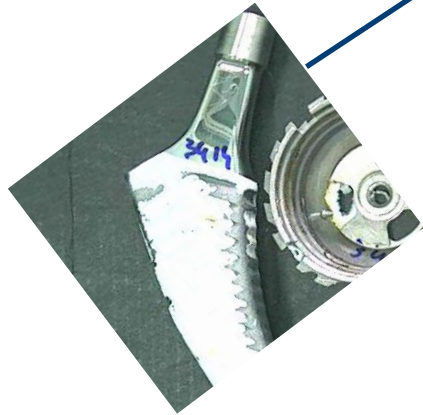
Judet
(51 l)



„calup“
prosthesis



Corail
(25,2 l)



Izoelastic
Stem
(28 l)



Izotitanic
Stem
(34,2 l)



Cemented Link
(45 l)





THANK YOU

Citation:

Levašič V, Blas M, Kovač S, Podovšovnik E., Milošev I. Valdoltra Hip Arthroplasty Registry Report 2025 (data 2002-2024) [Internet]. Valdoltra Orthopaedic Hospital. [cited 2026 March 1]. Available from: <https://www.ob-valdoltra.si/sl/international>