

Implant Bespoke Report for:

Smith & Nephew

Polarstem Cementless (Oxinium / XLPE / R3 cup)

Comprising PRIMARY hips implanted up to:
NJR Database extract:

09 September 2018
08 November 2018

Produced on:
Licenced for use until:

20 November 2018
20 November 2019

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This report has been produced by the National Joint Registry of England, Wales and Northern Ireland (NJR). It summarises usage and outcomes associated with the Polarstem Cementless (Oxinium / XLPE / R3 cup), based on data collected by the NJR up to the specified date, for the following combinations of products:

Femoral components

Polarstem Cementless (Oxinium / XLPE / R3 cup)

Acetabular Components

Any Acetabular Components manufactured by Smith & Nephew

Appendix A lists details of all Polarstem Cementless components included in this report.

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NJR Recorded Usage

Implant Usage

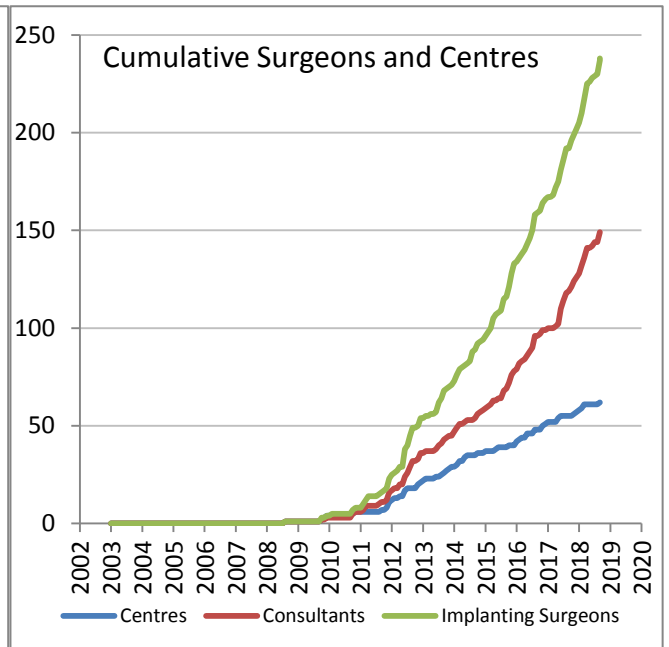
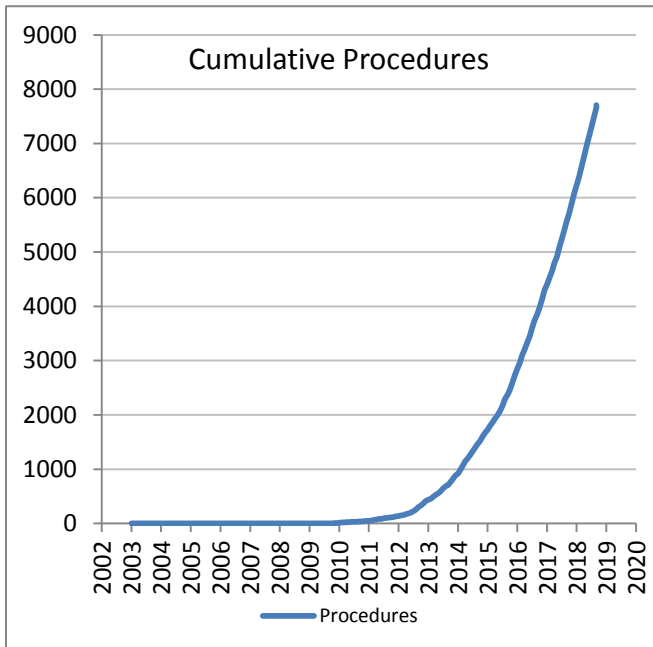
Date of first recorded usage in the NJR: **13 July 2008**

Date of last recorded usage in this dataset: **08 September 2018**

Maximum implantation time: 10.2 years

Mean implantation time: 2.3 years

Totals Recorded in NJR	Cumulative Total
Procedures	7,708
Patients	7,119
Centres	62
Consultants	149
Implanting Surgeons	238



Current Outcome	Year of implantation														Total	%
	Pre-2007	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018			
Death	0	0	0	4	14	21	37	39	40	33	31	16	4	239	3.1%	
Revised	0	0	0	0	0	2	4	4	9	17	11	14	5	66	0.9%	
Unrevised	0	0	1	6	23	67	260	438	757	1072	1517	1788	1474	7403	96.0%	
Total	0	0	1	10	37	90	301	481	806	1122	1559	1818	1483	7708	100%	

Patient / Procedure Details

Patient Details

	Polarstem Cementless (Oxinium / XLPE / R3 cup)	All NJR Cementless Stems	All NJR hip replacement
Total Procedures	7,708	435,844	1,070,534
Total Patients	7,119	378,629	912,154
Demographics			
Mean age	65.6	65.4	68.6
< 50	8.2%	8.4%	6.0%
50 – 59	19.3%	18.9%	13.7%
60 – 69	34.1%	35.0%	29.2%
70 – 79	29.4%	28.5%	34.6%
≥ 80	9.0%	9.3%	16.4%
Median BMI	28	28	28
% BMI information available	80.4%	62.1%	59.7%
Underweight (BMI < 18.5)	0.6%	0.7%	0.9%
Normal (18.5 ≤ BMI < 25)	17.7%	18.9%	20.8%
Overweight (25 ≤ BMI < 30)	40.8%	39.2%	39.7%
Obese I (30 ≤ BMI < 35)	27.0%	26.8%	25.7%
Obese II (35 ≤ BMI < 40)	10.7%	10.7%	9.6%
Obese III (BMI ≥ 40)	3.2%	3.7%	3.3%
% Male	45.8%	44.1%	40.2%
ASA Grades			
P1 - Fit and healthy	15.9%	18.5%	16.3%
P2 - Mild disease not incapacitating	67.9%	68.7%	67.6%
P3 - Incapacitating systemic disease	16.0%	12.4%	15.6%
P4 / P5	0.2%	0.4%	0.6%
Indications			
Osteoarthritis	92.81%	93.04%	91.72%
Rheumatoid Arthritis	2.41%	1.22%	1.32%
Avascular Necrosis	2.22%	2.59%	2.51%
Fractured Neck of Femur	1.97%	1.82%	3.20%
CDH/DDH	1.73%	2.02%	1.55%
Other	1.12%	1.82%	2.13%

Total of indications may exceed total number of implants, since more than one indication can be listed per case.

Revision and Survivorship

Reasons for Revision - All bearing types

Reasons for revision of primary procedures in which the implant was used.

Reason for Revision	Revised [†]	Expected Revisions [*]	p value
Unexplained Pain	6	15.54	0.01
Dislocation / Subluxation	18	24.03	0.258
Adverse Soft Tissue Reaction	2	7.71	0.03
Infection	13	19.31	0.169
Aseptic Loosening - Stem	7	16.93	0.01
Aseptic Loosening - Socket	4	9.45	0.098
Periprosthetic Fracture Stem	18	17.00	0.806
Periprosthetic Fracture Socket	1	2.36	0.736
Malalignment Stem	1	4.63	0.1
Malalignment Socket	0	7.11	0.002
Wear Of Acetabular Component	2	3.88	0.603
Lysis Stem	1	1.61	1
Lysis Socket	1	1.32	1
Implant Fracture Stem	1	1.66	1
Implant Fracture Socket	0	2.25	0.181
Implant Fracture Head	0	0.45	1
Dissociation of Liner	1	2.43	0.739
Other / reason not recorded	4	7.60	0.269
Total Revised	66	115.81	<0.001

† multiple reasons may be listed for one revision procedure

* Based on All NJR Cementless Stems adjusted for agegroup, gender, and indications

Significantly better, $p < 0.001$ Significantly better, $p < 0.05$ Significantly worse $p < 0.05$ Significantly worse $p < 0.001$ 

Components Revised	Number of procedures	Polarstem Cementless (Oxinium / XLPE / R3 cup)	All other Cementless Stems in NJR
Femoral only	28	42%	22%
Acetabular only	8	12%	34%
Both femoral and acetabular	13	20%	32%
Neither femoral nor acetabular revision recorded *	17	26%	11%

* includes isolated head and/or liner exchange

Revision and Survivorship

Reasons for Revision - excluding Metal on Metal

Reasons for revision of non-MoM primary procedures in which the implant was used.

Reason for Revision	Revised [†]	Expected Revisions [*]	p value
Unexplained Pain	6	11.77	0.105
Dislocation / Subluxation	18	23.87	0.257
Adverse Soft Tissue Reaction	2	2.40	1
Infection	13	18.62	0.241
Aseptic Loosening - Stem	7	16.00	0.023
Aseptic Loosening - Socket	4	7.64	0.27
Periprosthetic Fracture Stem	18	17.06	0.807
Periprosthetic Fracture Socket	1	2.37	0.736
Malalignment Stem	1	4.45	0.144
Malalignment Socket	0	6.57	0.003
Wear Of Acetabular Component	2	3.75	0.598
Lysis Stem	1	1.23	1
Lysis Socket	1	0.84	0.569
Implant Fracture Stem	1	1.59	1
Implant Fracture Socket	0	2.39	0.184
Implant Fracture Head	0	0.49	1
Dissociation of Liner	1	2.51	0.528
Other / reason not recorded	4	6.24	0.541
Total Revised	66	104.86	<0.001

* Based on All NJR Cementless Stems (excluding metal on metal), adjusted for agegroup, gender, and indications

† multiple reasons may be listed for one revision procedure

Significantly better, $p < 0.001$

Significantly better, $p < 0.05$

Significantly worse $p < 0.05$

Significantly worse $p < 0.001$

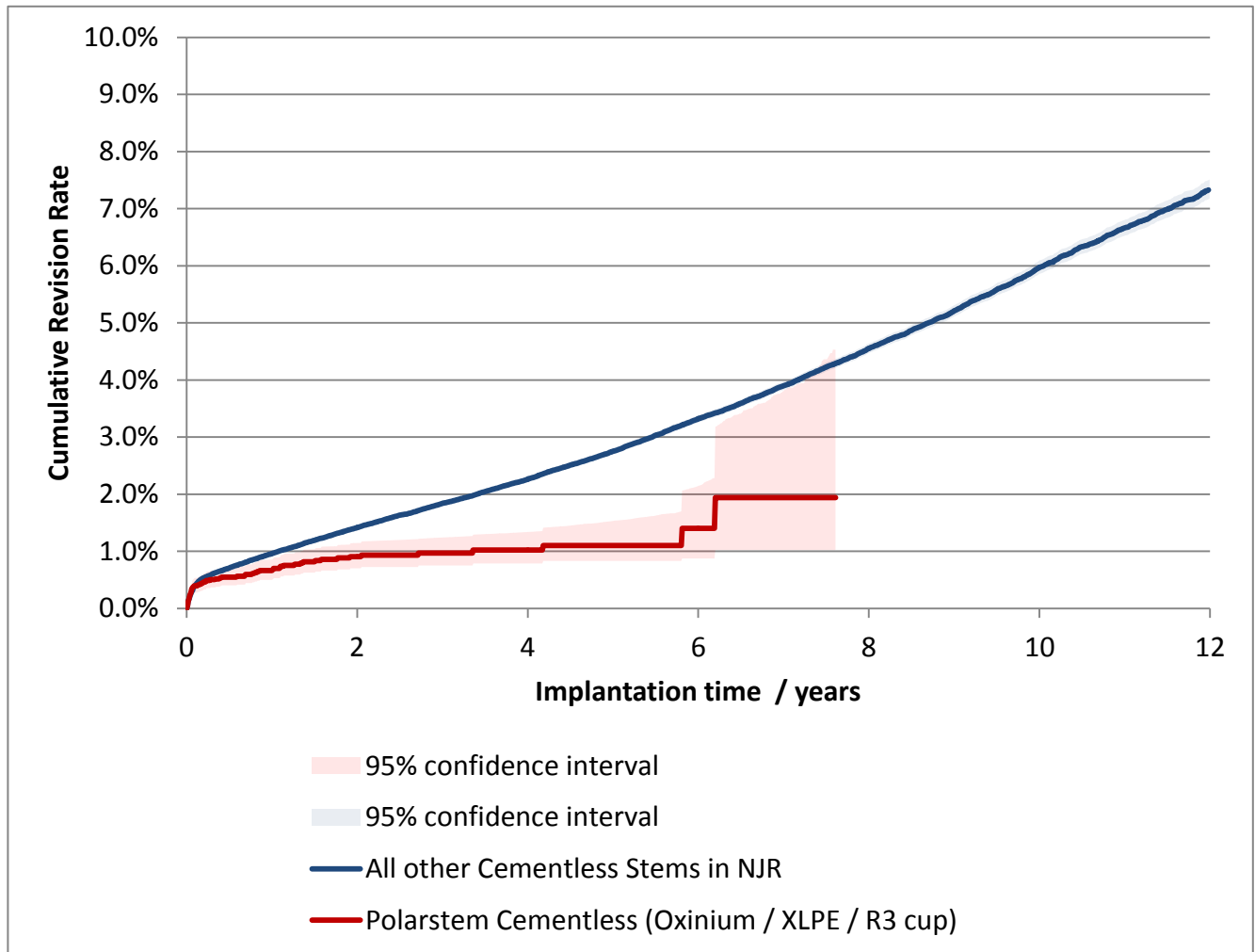


Components Revised	Number of procedures	Polarstem Cementless (Oxinium / XLPE / R3 cup)	All other Cementless Stems in NJR
Femoral only	28	42%	30%
Acetabular only	8	12%	26%
Both femoral and acetabular	13	20%	32%
Neither femoral nor acetabular revision recorded *	17	26%	12%

Revision and Survivorship

Cumulative Revision Rate

Endpoint: All reasons for revision. All Bearing types



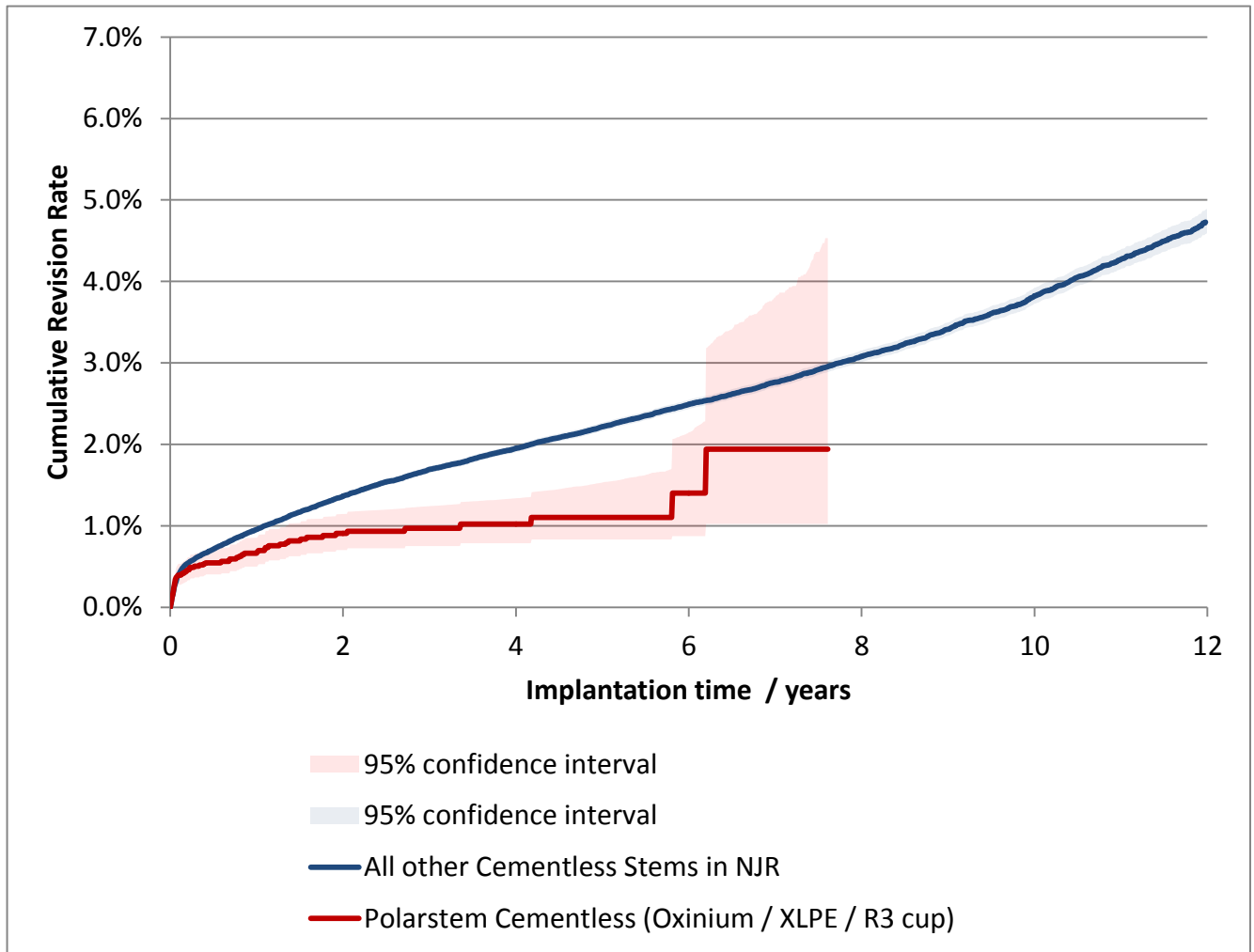
Cox Proportional Hazards model for revision risk ratio of Polarstem Cementless (Oxinium / XLPE / R3 cup) / All other Cementless Stems in NJR, with endpoint as any revision.

Adjustment	Hazard Ratio (95% CI)	p-value
All bearings. Unadjusted.	0.56 (0.44 - 0.71)	<0.001
All bearings. Adjusted for age, gender, year cohort and indications.	0.71 (0.55 - 0.90)	0.005

Revision and Survivorship

Cumulative Revision Rate

Endpoint: All reasons for revision. Excluding Metal-on-Metal



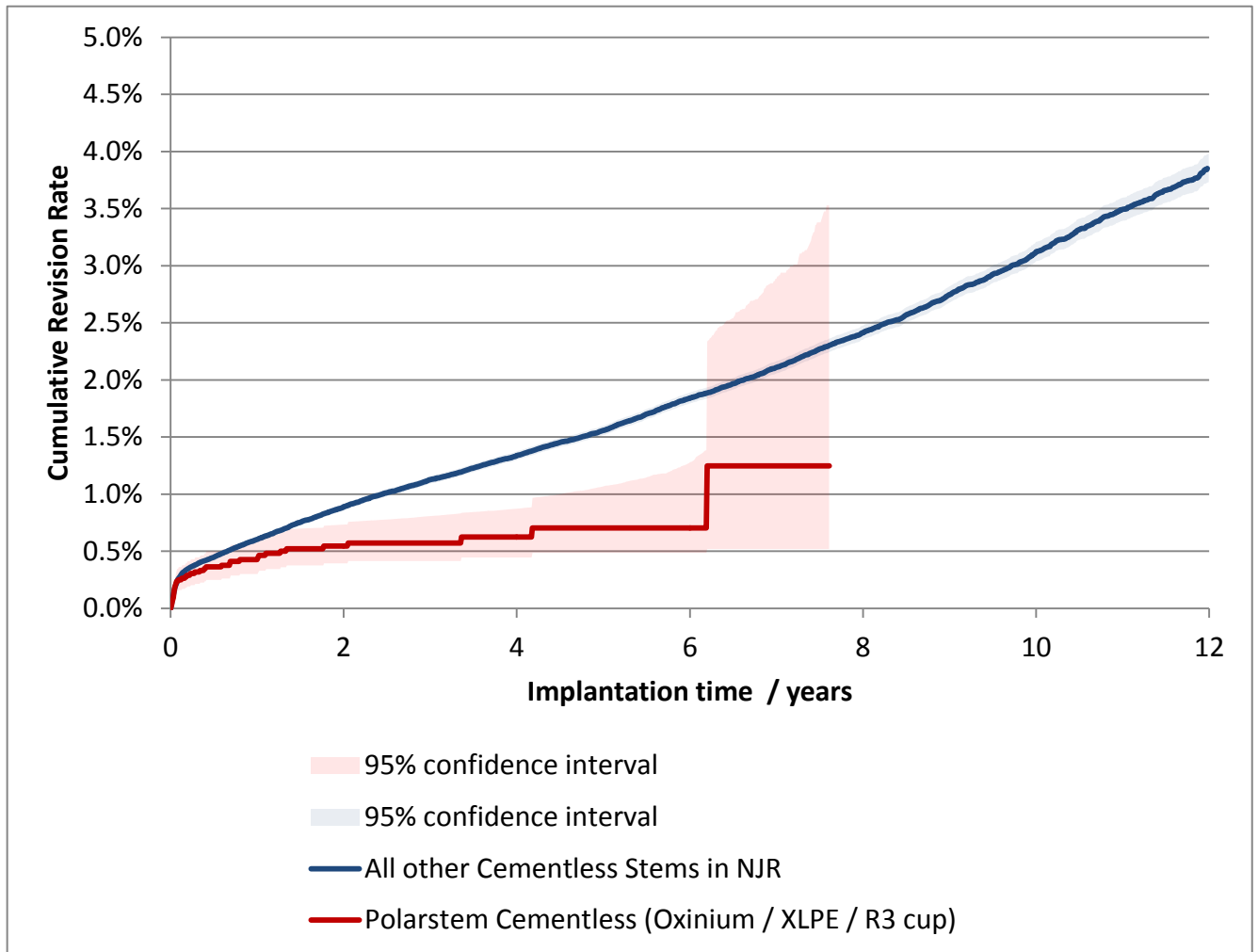
Cox Proportional Hazards model for revision risk ratio of Polarstem Cementless (Oxinium / XLPE / R3 cup) / All other Cementless Stems in NJR, with endpoint as any revision.

Adjustment	Hazard Ratio (95% CI)	p-value
Excluding MoM, Unadjusted.	0.62 (0.49 - 0.79)	<0.001
Excluding MoM. Adjusted for age, gender, year cohort and indications.	0.71 (0.56 - 0.91)	0.006

Revision and Survivorship

Cumulative Revision Rate

Endpoint: Femoral Revision. All Bearing types



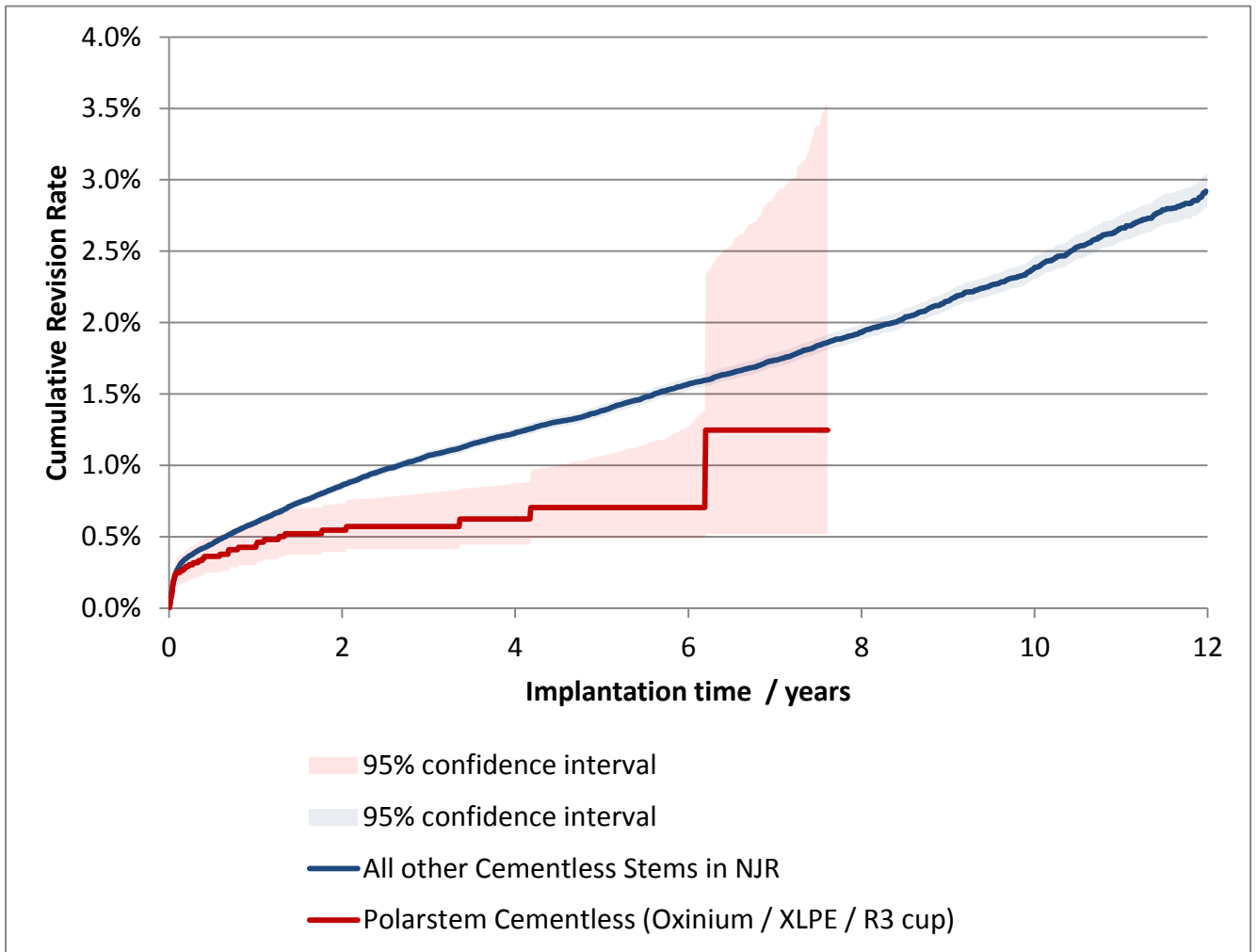
Cox Proportional Hazards model for revision risk ratio of Polarstem Cementless (Oxinium / XLPE / R3 cup) / all other All other Cementless Stems in NJR, with endpoint as Femoral revision.

Adjustment	Hazard Ratio (95% CI)	p-value
All bearings. Unadjusted.	0.58 (0.42 - 0.78)	<0.001
All bearings. Adjusted for age, gender, year cohort and indications.	0.70 (0.51 - 0.95)	0.023

Revision and Survivorship

Cumulative Revision Rate

Endpoint: Femoral Revision. Excluding Metal-on-Metal



Cox Proportional Hazards model for revision risk ratio of Polarstem Cementless (Oxinium / XLPE / R3 cup) / All other Cementless Stems in NJR, with endpoint as Femoral revision.

Adjustment	Hazard Ratio (95% CI)	p-value
Excluding MoM, Unadjusted	0.61 (0.45 - 0.84)	0.002
Excluding MoM. Adjusted for age, gender, year cohort and indications.	0.70 (0.51 - 0.95)	0.024

Revision and Survivorship

Cumulative Revision Rate

Endpoint: All revisions

Period /years	All Bearing types				Excluding Metal on Metal Bearings			
	At Risk	Polarstem Cementless (Oxinium / XLPE / R3 cup)	All NJR Cementless Stems	All THR	At Risk	Polarstem Cementless (Oxinium / XLPE / R3 cup)	All NJR Cementless Stems	All THR
0	7,708	-	-	-	7,708	-	-	-
1	5,517	0.7% (0.5% - 0.9%)	1.0% (0.9% - 1.0%)	0.8% (0.8% - 0.8%)	5,517	0.7% (0.5% - 0.9%)	0.9% (0.9% - 1.0%)	0.8% (0.7% - 0.8%)
2	3,755	0.9% (0.7% - 1.1%)	1.4% (1.4% - 1.4%)	1.2% (1.1% - 1.2%)	3,755	0.9% (0.7% - 1.1%)	1.4% (1.3% - 1.4%)	1.1% (1.1% - 1.1%)
3	2,285	1.0% (0.8% - 1.2%)	1.8% (1.8% - 1.9%)	1.5% (1.5% - 1.5%)	2,285	1.0% (0.8% - 1.2%)	1.7% (1.6% - 1.7%)	1.4% (1.4% - 1.4%)
4	1,382	1.0% (0.8% - 1.3%)	2.2% (2.2% - 2.3%)	1.9% (1.9% - 1.9%)	1,382	1.0% (0.8% - 1.3%)	1.9% (1.9% - 2.0%)	1.6% (1.6% - 1.6%)
5	646	1.1% (0.8% - 1.5%)	2.7% (2.7% - 2.8%)	2.3% (2.3% - 2.3%)	646	1.1% (0.8% - 1.5%)	2.2% (2.1% - 2.2%)	1.9% (1.8% - 1.9%)
6	259	1.4% (0.9% - 2.1%)	3.3% (3.2% - 3.4%)	2.7% (2.7% - 2.8%)	259	1.4% (0.9% - 2.1%)	2.5% (2.4% - 2.5%)	2.1% (2.1% - 2.2%)
7	78	1.9% (1.0% - 3.8%)	3.9% (3.8% - 3.9%)	3.2% (3.2% - 3.3%)	78	1.9% (1.0% - 3.8%)	2.7% (2.7% - 2.8%)	2.4% (2.3% - 2.4%)
8		(-)	4.5% (4.4% - 4.6%)	3.7% (3.7% - 3.8%)		(-)	3.1% (3.0% - 3.1%)	2.7% (2.6% - 2.7%)
9		(-)	5.2% (5.1% - 5.3%)	4.3% (4.2% - 4.3%)		(-)	3.4% (3.3% - 3.5%)	3.0% (3.0% - 3.1%)
10		(-)	5.9% (5.8% - 6.1%)	4.8% (4.8% - 4.9%)		(-)	3.8% (3.7% - 3.9%)	3.4% (3.3% - 3.4%)
11		(-)	6.6% (6.5% - 6.8%)	5.4% (5.3% - 5.5%)		(-)	4.2% (4.1% - 4.4%)	3.8% (3.8% - 3.9%)
12		(-)	7.3% (7.1% - 7.5%)	6.0% (5.9% - 6.1%)		(-)	4.7% (4.6% - 4.9%)	4.3% (4.2% - 4.4%)
13		(-)	7.9% (7.7% - 8.1%)	6.6% (6.5% - 6.7%)		(-)	5.3% (5.1% - 5.5%)	4.8% (4.7% - 4.9%)
14		(-)	8.6% (8.3% - 8.9%)	7.2% (7.0% - 7.3%)		(-)	5.9% (5.6% - 6.2%)	5.2% (5.1% - 5.4%)
15		(-)	(-)	7.9% (7.6% - 8.1%)		(-)	(-)	6.0% (5.7% - 6.2%)

Cumulative revision rate with 95% confidence intervals

Rate is only reported for times where more than 40 remain at risk

Revision and Survivorship

Cumulative Revision Rate

Endpoint: Femoral Revision

Period /years	All Bearing types				Excluding Metal on Metal Bearings			
	At Risk	Polarstem Cementless (Oxinium / XLPE / R3 cup)	All NJR Cementless Stems	All THR	At Risk	Polarstem Cementless (Oxinium / XLPE / R3 cup)	All NJR Cementless Stems	All THR
0	7,708	-	-	-	7,708	-	-	-
1	5,517	0.4% (0.3% - 0.6%)	0.6% (0.6% - 0.6%)	0.5% (0.5% - 0.5%)	5,517	0.4% (0.3% - 0.6%)	0.6% (0.6% - 0.6%)	0.5% (0.5% - 0.5%)
2	3,755	0.5% (0.4% - 0.7%)	0.9% (0.9% - 0.9%)	0.8% (0.7% - 0.8%)	3,755	0.5% (0.4% - 0.7%)	0.9% (0.8% - 0.9%)	0.7% (0.7% - 0.7%)
3	2,285	0.6% (0.4% - 0.8%)	1.1% (1.1% - 1.2%)	1.0% (1.0% - 1.0%)	2,285	0.6% (0.4% - 0.8%)	1.1% (1.0% - 1.1%)	0.9% (0.9% - 0.9%)
4	1,382	0.6% (0.4% - 0.9%)	1.3% (1.3% - 1.4%)	1.2% (1.2% - 1.3%)	1,382	0.6% (0.4% - 0.9%)	1.2% (1.2% - 1.3%)	1.0% (1.0% - 1.1%)
5	646	0.7% (0.5% - 1.1%)	1.5% (1.5% - 1.6%)	1.5% (1.5% - 1.5%)	646	0.7% (0.5% - 1.1%)	1.4% (1.3% - 1.4%)	1.2% (1.2% - 1.2%)
6	259	0.7% (0.5% - 1.3%)	1.8% (1.8% - 1.9%)	1.8% (1.8% - 1.8%)	259	0.7% (0.5% - 1.3%)	1.6% (1.5% - 1.6%)	1.4% (1.4% - 1.4%)
7	78	1.2% (0.5% - 2.9%)	2.1% (2.0% - 2.1%)	2.1% (2.1% - 2.1%)	78	1.2% (0.5% - 2.9%)	1.7% (1.7% - 1.8%)	1.6% (1.5% - 1.6%)
8		(-)	2.4% (2.3% - 2.5%)	2.4% (2.4% - 2.5%)		(-)	1.9% (1.9% - 2.0%)	1.8% (1.7% - 1.8%)
9		(-)	2.7% (2.7% - 2.8%)	2.8% (2.8% - 2.9%)		(-)	2.1% (2.1% - 2.2%)	2.0% (2.0% - 2.1%)
10		(-)	3.1% (3.0% - 3.2%)	3.2% (3.1% - 3.2%)		(-)	2.4% (2.3% - 2.4%)	2.3% (2.2% - 2.3%)
11		(-)	3.5% (3.4% - 3.6%)	3.6% (3.5% - 3.7%)		(-)	2.6% (2.6% - 2.7%)	2.6% (2.5% - 2.6%)
12		(-)	3.8% (3.7% - 4.0%)	4.0% (4.0% - 4.1%)		(-)	2.9% (2.8% - 3.0%)	2.9% (2.8% - 2.9%)
13		(-)	4.2% (4.1% - 4.4%)	4.5% (4.4% - 4.5%)		(-)	3.3% (3.1% - 3.4%)	3.2% (3.1% - 3.3%)
14		(-)	4.5% (4.3% - 4.7%)	4.9% (4.7% - 5.0%)		(-)	3.5% (3.3% - 3.7%)	3.5% (3.4% - 3.6%)
15		(-)	(-)	5.3% (5.2% - 5.5%)		(-)	(-)	4.0% (3.8% - 4.2%)

Cumulative revision rate with 95% confidence intervals

Rate is only reported for times where more than 40 remain at risk

Patient Reported Outcomes

PROMs Analysis

Oxford Hip Score (0 - 48)	Polarstem Cementless (Oxinium / XLPE / R3 cup)	All NJR Cementless Stems	All THR in NJR
Paired Records	1,799	111,055	247,104
PreOp score	17.8 (17.4 - 18.2)	18.5 (18.5 - 18.6)	18.1 (18.1 - 18.1)
6 month score	40.9 (40.5 - 41.3)	39.7 (39.7 - 39.8)	39.2 (39.2 - 39.3)
6 month score (adjusted)	40.9 (40.5 - 41.2)	39.3 (39.3 - 39.4)	39.2 (39.2 - 39.3)
Health gain	23.1 (22.7 - 23.6)	21.2 (21.1 - 21.3)	21.1 (21.1 - 21.2)
Health gain (adjusted)	22.8 (22.4 - 23.1)	21.2 (21.2 - 21.3)	21.1 (21.1 - 21.2)
p value (adjusted health gain)	< 0.001		
Score Improved	97.9%	97.0%	97.1%

EQ-5D Index (-0.59 - 1.00)	Polarstem Cementless (Oxinium / XLPE / R3 cup)	All NJR Cementless Stems	All THR in NJR
Paired Records	1,685	102,448	226,875
PreOp score	0.360 (0.345 - 0.375)	0.372 (0.370 - 0.374)	0.357 (0.356 - 0.359)
6 month score	0.818 (0.807 - 0.830)	0.798 (0.797 - 0.800)	0.789 (0.788 - 0.790)
6 month score (adjusted)	0.819 (0.809 - 0.830)	0.792 (0.790 - 0.793)	0.789 (0.788 - 0.790)
Health gain	0.458 (0.442 - 0.475)	0.426 (0.424 - 0.428)	0.432 (0.431 - 0.433)
Health gain (adjusted)	0.462 (0.451 - 0.473)	0.434 (0.433 - 0.436)	0.432 (0.431 - 0.433)
p value (adjusted health gain)	< 0.001		
Score Improved	91.0%	89.1%	89.2%

EQ-VAS (0 - 100)	Polarstem Cementless (Oxinium / XLPE / R3 cup)	All NJR Cementless Stems	All THR in NJR
Paired Records	1,605	98,610	217,695
PreOp score	64.2 (63.2 - 65.3)	65.6 (65.5 - 65.8)	65.3 (65.2 - 65.4)
6 month score	79.5 (78.7 - 80.3)	77.4 (77.3 - 77.5)	76.6 (76.6 - 76.7)
6 month score (adjusted)	79.5 (78.7 - 80.2)	76.8 (76.7 - 76.9)	76.6 (76.6 - 76.7)
Health gain	15.2 (14.1 - 16.4)	11.7 (11.6 - 11.9)	11.3 (11.2 - 11.4)
Health gain (adjusted)	14.2 (13.4 - 14.9)	11.4 (11.3 - 11.5)	11.3 (11.3 - 11.4)
p value (adjusted health gain)	< 0.001		
Score Improved	71.5%	66.1%	65.0%

Adjusted scores correspond to the NHS Digital version 3 casemix-adjustment model. This includes patient variables from PROMs, HES, and IMD data.

Bespoke Report for:

Polarstem Cementless (Oxinium / XLPE / R3 cup)

Responses are not case mix adjusted

Patient Reported Outcomes



Chi-squared p-value for difference: <0.001

Chi-squared p-value for difference: <0.001

Answer to 6-months general health question: Overall, how are your problems now, compared to before your operation?

Answer to 6-months general health question: How would you describe the results of your operation?

Disclaimer

Disclaimer

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Appendix A: Femoral Stems

Catalogue Number	Description	Number Implanted
11000331	standard stem	1
11000332	POLARSTEM Stand Offset Ti/HA Stem Sz 4	4
75002069	POLARSTEM cementless standard stem size 0	2
75002070	POLARSTEM cementless standard stem size 1	7
75002071	POLARSTEM cementless standard stem size 2	11
75002072	POLARSTEM cementless standard stem size 3	12
75002073	POLARSTEM cementless standard stem size 4	17
75002074	POLARSTEM cementless standard stem size 5	11
75002075	POLARSTEM cementless standard stem size 6	6
75002076	POLARSTEM cementless standard stem size 7	5
75002078	POLARSTEM cementless lateralised stem size 1	2
75002080	POLARSTEM cementless lateralised stem size 3	1
75002081	POLARSTEM cementless lateralised stem size 4	3
75002082	POLARSTEM cementless lateralised stem size 5	1
75002114	POLARSTEM Cementless Stem Std 135 degree Ti.HA Size 3	1
75018112	PLUS POLARSTEM Titanium Stem Std Ti.HA 9	1
75018399	POLARSTEM Collar standard Ti/HA 01	2
75018400	POLARSTEM Collar standard Ti/HA 0	22
75018401	POLARSTEM Collar standard Ti/HA 1	50
75018402	POLARSTEM Collar standard Ti/HA 2	63
75018403	POLARSTEM Collar standard Ti/HA 3	60
75018404	POLARSTEM Collar standard Ti/HA 4	26
75018405	POLARSTEM Collar standard Ti/HA 5	16
75018406	POLARSTEM Collar standard Ti/HA 6	14
75018407	POLARSTEM Collar standard Ti/HA 7	5
75018409	POLARSTEM Collar standard Ti/HA 9	2
75018412	POLARSTEM Collar lateral Ti/HA 1	10
75018413	POLARSTEM Collar lateral Ti/HA 2	12
75018414	POLARSTEM Collar lateral Ti/HA 3	9
75018415	POLARSTEM Collar lateral Ti/HA 4	9
75018416	POLARSTEM Collar lateral Ti/HA 5	8
75018417	POLARSTEM Collar lateral Ti/HA 6	4
75018418	POLARSTEM Collar lateral Ti/HA 7	2
75100462	Stem Standard with Ti/HA Cone 12/14 Size 01	160
75100463	Smith and Nephew polar stem R stem standard with ti/ha Size 0	488
75100464	POLARSTEM Cementless Stem Std Ti.HA 1	1,032
75100465	Smith and Nephew polar stem R stem standard with ti/ha Size 2	1,351
75100466	Smith and Nephew polar stem R stem standard with ti/ha Size 3	1,090
75100467	POLARSTEM Cementless Stem Std Ti.HA 4	618
75100468	POLARSTEM Cementless Stem Std Ti.HA 5	358
75100469	POLARSTEM Cementless Stem Std Ti.HA 6	224
75100470	Smith and Nephew polar stem R stem standard with ti/ha Size 7	139
75100471	Smith and Nephew polar stem R stem standard with ti/ha Size 8	81
75100472	Smith and Nephew polar stem R stem standard with ti/ha Size 9	26
75100473	Smith and Nephew polar stem R stem standard with ti/ha Size 10	4
75100474	POLARSTEM SIZE 1 LATERAL	300

Appendix A: Femoral Stems

Catalogue Number	Description	Number Implanted
75100475	POLARSTEM SIZE 2 LATERAL	392
75100476	POLARSTEM Cementless Stem Lat Ti.HA 3	419
75100477	POLARSTEM Cementless Stem Lat Ti.HA 4	241
75100478	POLARSTEM LATERAL WITH TI/HA SIZE 5	153
75100479	POLARSTEM lateral with Ti.HA 6	113
75100480	POLARSTEM LATERAL WITH TI/HA	79
75100481	POLARSTEM LATERAL WITH TI/HA SIZE 8 LATERAL	28
75100482	POLARSTEM Cementless Stem Lat Ti.HA 9	12
75102074	POLARSTEM VALGUS TI/HA SIZE 2	1

Appendix B: Femoral Heads

Catalogue Number	Description	Number Implanted
71342200	OXI FEM HEAD 12/14 TPR 22MM +0	5
71342204	OXI FEM HEAD 12/14 TPR 22MM +4	3
71342340	40MM OXINIUM MODULAR HEAD	94
71342344	44MM OXINIUM MODULAR HEAD	12
71342800	OXI FEM HEAD 12/14 TPR 28MM +0	763
71342803	OXI FEM HEAD 12/14 TPR 28MM -3	200
71342804	OXI FEM HEAD 12/14 TPR 28MM +4	466
71342808	OXI FEM HEAD 12/14 TPR 28MM +8	71
71342812	OXI FEM HEAD 12/14 TPR 28MM +1	6
71343200	OXI FEM HEAD 12/14 TPR 32mm +0	3389
71343203	OXI FEM HEAD 12/14 TPR 32mm -3	1497
71343204	OXI FEM HEAD 12/14 TPR 32mm +4	2144
71343208	OXI FEM HEAD 12/14 TPR 32mm +8	376
71343212	OXI FEM HEAD 12/14 TPR 32mm +1	24
71343216	OXI FEM HEAD 12/14 TPR 32mm +1	1
71343600	OXI FEM HEAD 12/14 TPR 36mm +0	2441
71343603	OXI FEM HEAD 12/14 TPR 36mm -3	1154
71343604	OXI FEM HEAD 12/14 TPR 36mm +4	1422
71343608	OXI FEM HEAD 12/14 TPR 36mm +8	351
71343612	OXI FEM HEAD 12/14 TPR 36mm +1	61

Appendix C: Acetabular Liners

Catalogue Number	Description	Number Implanted
71330766	R3 ODEG XLPE ACET LNR 36 X 66/70	2
71331106	R3 20 DEG XLPE LNR 44MM ID X 60 OD	12
71332752	R3 0 DEG XLPE ACET LNR 36MM X 52MM	782
71332754	R3 0 DEG XLPE ACET LNR 36MM X 54MM	588
71332756	R3 0 DEG XLPE ACET LNR 36MM X MM56	468
71332758	R3 XLPE liner 36mm 0 deg 58	275
71332760	R3 0 DEG XLPE ACET LNR 36MM X 60MM	150
71332762	R3 0 DEG XLPE ACET LNR 36MM X 62MM	70
71332764	R3 0 DEG XLPE ACET LNR 36MM X 64MM	23
71332766	R3 0 DEG XLPE ACET LNR 36MM X 66/68MM	3
71334844	R3 0 DEG XLPE ACET LNR 22MM X 44MM	1
71334944	R3 20 DEG XLPE ACET LNR 22MM X 44MM	7
71334946	R3 20 DEG XLPE ACET LNR 28MM X 46MM	240
71334948	R3 20 DEG XLPE ACET LNR 28MM X 48MM	188
71334950	R3 20 DEG XLPE ACET LNR 28MM X 50MM	343
71334952	R3 20 DEG XLPE ACET LNR 28MM X 52MM	248
71334954	R3 20 DEG XLPE ACET LNR 28MM X 54MM	98
71334956	R3 20 DEG XLPE ACET LNR 28MM X 56MM	67
71334958	R3 20 DEG XLPE ACET LNR 28MM X 58MM	25
71334960	R3 20 DEG XLPE ACET LNR 28MM X 60MM	6
71335752	R3 20 DEG XLPE ACET LNR 36MM X 52MM	996
71335754	R3 20 DEG XLPE ACET LNR 36MM X 54MM	792
71335756	R3 20 DEG XLPE ACET LNR 36MM X 56MM	607
71335758	R3 20 DEG XLPE ACET LNR 36MM X 58MM	398
71335760	R3 20 DEG XLPE ACET LNR 36MM X 60MM	184
71335762	R3 20 DEG XLPE ACET LNR 36MM X 62MM	55
71335764	R3 20 DEG XLPE ACET LNR 36MM X 64MM	34
71335766	R3 20 DEG XLPE ACET LNR 36MM X 66/68MM	2
71337546	R3 0 DEG XLPE ACET LNR 28MM X 46MM	89
71337548	R3 0 DEG XLPE ACET LNR 28MM X 48MM	50
71337550	R3 0 DEG XLPE ACET LNR 28MM X 50MM	61
71337552	R3 0 DEG XLPE ACET LNR 28MM X 52MM	54
71337554	R3 0 DEG XLPE ACET LNR 28MM X 54MM	22
71337556	R3 0 DEG XLPE ACET LNR 28MM X 56MM	14
71337648	R3 20 DEG XLPE ACET LNR 32MM X 48MM	958
71337650	R3 20 DEG XLPE ACET LNR 32MM X 50MM	1640
71337652	R3 20 DEG XLPE ACET LNR 32MM X 52MM	1205
71337654	R3 20 DEG XLPE ACET LNR 32MM X 54MM	886
71337656	R3 20 DEG XLPE ACET LNR 32MM X 56MM	639
71337658	R3 20 DEG XLPE ACET LNR 32MM X 58MM	310
71337660	R3 20 DEG XLPE ACET LNR 32MM X 60MM	106
71337662	R3 20 DEG XLPE ACET LNR 32MM X 62MM	29
71338687	R3 20 DEG XLPE LNR 40MM ID X 56OD	87
71338688	R3 20 DEG XLPE LNR 40MM ID X 58OD	7
71339548	R3 0 DEG XLPE ACET LNR 32MM X 48MM	333
71339550	R3 0 DEG XLPE ACET LNR 32MM X 50MM	668

Appendix C: Acetabular Liners

Catalogue Number	Description	Number Implanted
71339552	R3 0 DEG XLPE ACET LNR 32MM X 52MM	315
71339554	R3 0 DEGREE XLPE LNR 32MM X 54MM	179
71339556	R3 0 DEG XLPE ACET LNR 32MM X 56MM	108
71339558	R3 0 DEG XLPE ACET LNR 32MM X 58MM	35
71339560	R3 0 DEG XLPE ACET LNR 32MM X 60MM	12
71339562	R3 0 DEG XLPE ACET LNR 32MM X 62MM	9

Appendix D: Acetabular Cups

Catalogue Number	Description	Number Implanted
71331940	R3 3 HOLE HA CTD ACET SHELL 40MM	1
71331944	R3 3 HOLE HA CTD ACET SHELL 44MM	8
71331946	R3 3 HOLE HA CTD ACET SHELL 46MM	295
71331948	R3 3 HOLE HA CTD ACET SHELL 48MM	1362
71331950	R3 3 HOLE HA CTD ACET SHELL 50MM	2362
71331952	R3 3 HOLE HA CTD ACET SHELL 52MM	3107
71331954	R3 3 HOLE HA CTD ACET SHELL 54MM	2261
71331956	R3 3 HOLE HA CTD ACET SHELL 56MM	1668
71331958	R3 3 HOLE HA CTD ACET SHELL 58MM	899
71331960	R3 3 HOLE HA CTD ACET SHELL 60MM	399
71331962	R3 3 HOLE HA CTD ACET SHELL 62MM	144
71331964	R3 3 HOLE HA CTD ACET SHELL 64MM	54
71331966	R3 3 HOLE HA CTD ACET SHELL 66MM	6
71331968	R3 3 HOLE HA CTD ACET SHELL 68MM	1
71332246	R3 0 HOLE HA CTD ACET SHELL 46MM	32
71332248	R3 0 HOLE HA CTD ACET SHELL 48MM	167
71332250	R3 0 HOLE HA CTD ACET SHELL 50MM	344
71332252	R3 0 HOLE HA CTD ACET SHELL 52MM	490
71332254	R3 0 HOLE HA CTD ACET SHELL 54MM	308
71332256	R3 0 HOLE HA CTD ACET SHELL 56MM	321
71332258	R3 0 HOLE HA CTD ACET SHELL 58MM	152
71332260	R3 0 HOLE HA CTD ACET SHELL 60MM	72
71332262	R3 0 HOLE HA CTD ACET SHELL 62MM	19
71332264	R3 0 HOLE HA CTD ACET SHELL 64MM	2
71335548	R3 3 HOLE ACET SHELL MM48	2
71335550	R3 3 HOLE ACET SHELL 50MM	4