

Implant Summary Report for:

Zimmer Biomet

MS-30 Stem

Comprising PRIMARY hips implanted up to:
NJR Database extract:

04 March 2023
03 May 2023

Produced on:
Licensed for use until:

07 June 2023
07 June 2024

Contents

Recorded Usage in NJR	2
Patient and Procedure Details	3
Revision and Survivorship	4
Patient Reported Outcome Measures	12
APPENDIX A – Component List	17

This report has been produced by the National Joint Registry (NJR). It summarises usage and outcomes associated with the MS-30 Stem up to the specified dates. This analysis is based on data collected by the NJR and PROMs data collected by NHS Digital for the following combinations of products:

Femoral components

MS-30 Stem

Acetabular Component

Any Acetabular Component from all manufacturers

Appendix A lists details of all MS-30 Stem components included in this report.

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NJR Recorded Usage

Implant Usage

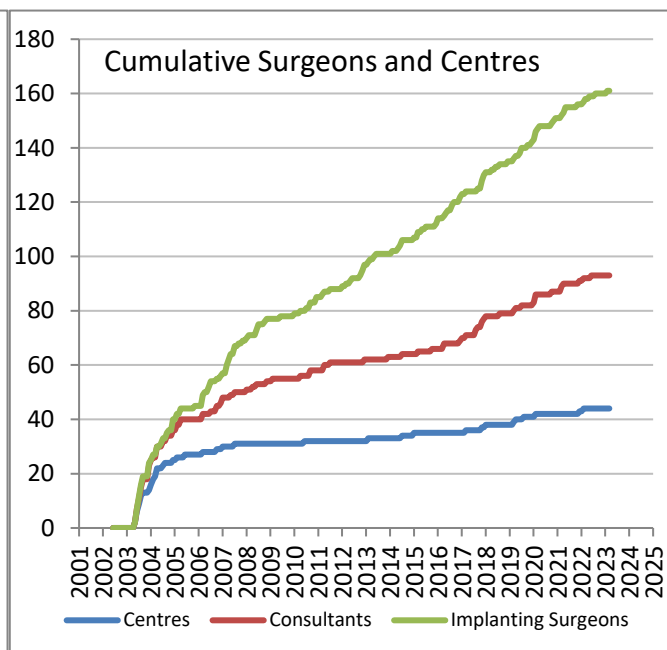
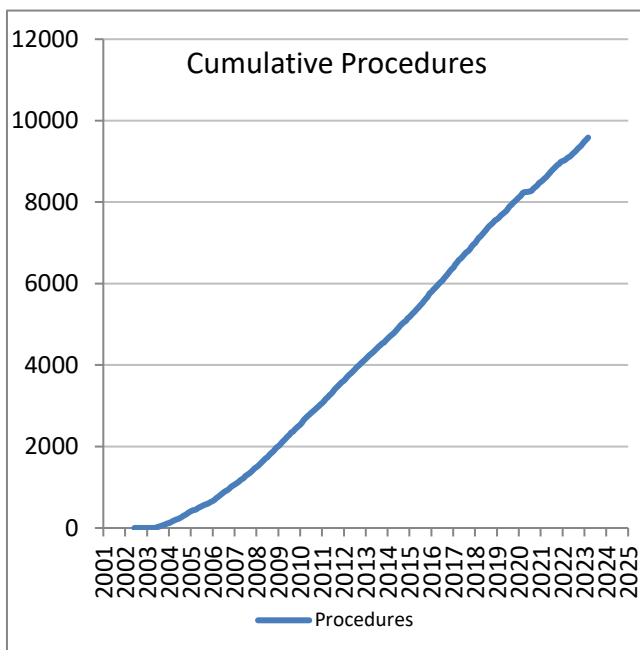
Date of first recorded usage in the NJR: **04 April 2003**

Date of last recorded usage in this dataset: **04 March 2023**

Maximum implantation time: 19.9 years

Mean implantation time: 7.6 years

Totals Recorded in NJR	Cumulative Total
Procedures	9,586
Patients	8,371
Centres	44
Consultants	93
Implanting Surgeons	161



Current Outcome	Year of implantation													Total	%
	Pre-2012	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		
Death	1667	166	133	143	99	99	84	60	37	11	10	7	0	2516	26.2%
Revised	110	6	7	5	9	7	6	5	5	4	1	3	1	169	1.8%
Unrevised	1840	359	363	384	501	493	515	518	494	371	498	473	92	6901	72.0%
Total	3617	531	503	532	609	599	605	583	536	386	509	483	93	9586	100%

Patient / Procedure Details

Patient Details

	MS-30 Stem	All other Cemented Stems in NJR	All NJR hip replacement
Total Procedures	9,586	824,556	1,493,817
Total Patients	8,371	716,444	1,244,377
Demographics			
Mean age	72.2	71.9	68.7
< 50	1.8%	3.0%	6.2%
50 – 59	8.7%	8.8%	14.6%
60 – 69	27.9%	25.4%	29.3%
70 – 79	39.3%	41.4%	34.5%
≥ 80	22.3%	21.4%	15.4%
Median BMI	27	28	28
% BMI information available	60.3%	65.5%	65.0%
Underweight (BMI < 18.5)	1.2%	1.0%	0.9%
Normal (18.5 ≤ BMI < 25)	25.8%	22.3%	20.9%
Overweight (25 ≤ BMI < 30)	40.7%	39.4%	39.3%
Obese I (30 ≤ BMI < 35)	21.9%	25.0%	25.8%
Obese II (35 ≤ BMI < 40)	7.2%	9.2%	9.9%
Obese III (BMI ≥ 40)	3.0%	3.1%	3.3%
% Male	33.3%	35.2%	40.2%
ASA Grades			
P1 - Fit and healthy	17.1%	11.0%	14.7%
P2 - Mild disease not incapacitating	66.7%	67.8%	67.8%
P3 - Incapacitating systemic disease	15.7%	20.5%	16.8%
P4 / P5	0.6%	0.8%	0.6%
Indications			
Osteoarthritis	93.33%	89.57%	91.14%
Rheumatoid Arthritis	1.02%	1.42%	1.30%
Avascular Necrosis	1.60%	2.67%	2.60%
Fractured Neck of Femur	3.51%	5.54%	3.88%
CDH/DDH	0.58%	1.14%	1.59%
Other	1.37%	2.22%	2.07%

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	7	16.75	0.013
Dislocation / Subluxation	45	54.39	0.219
Adverse Soft Tissue Reaction	12	7.59	0.137
Infection	35	45.13	0.134
Aseptic Loosening - Stem	14	27.41	0.007
Aseptic Loosening - Socket	23	50.82	<0.001
Periprosthetic Fracture Stem	32	41.34	0.158
Periprosthetic Fracture Socket	0	4.01	0.039
Malalignment Stem	1	4.80	0.101
Malalignment Socket	5	9.68	0.145
Wear Of Acetabular Component	9	13.24	0.329
Lysis Stem	3	8.65	0.056
Lysis Socket	9	11.25	0.651
Implant Fracture Stem	5	6.02	0.838
Implant Fracture Socket	1	1.29	1
Implant Fracture Head	2	0.95	0.247
Dissociation of Liner	2	2.28	1
Other / reason not recorded	4	6.54	0.429
Total Revised	169	233.58	<0.001

[†] multiple reasons may be listed for one revision procedure^{*} Based on All NJR Cemented Stems, adjusted for agegroup, gender, indications, and implantation yearSignificantly better, $p < 0.001$ Significantly better, $p < 0.05$ Significantly worse $p < 0.05$ Significantly worse $p < 0.001$ 

Components Revised	Number of procedures	MS-30 Stem	All other Cemented Stems in NJR
Femoral only	38	22%	22%
Acetabular only	45	27%	23%
Both femoral and acetabular	65	38%	45%
Neither femoral nor acetabular revision recorded [*]	21	12%	10%

^{*} 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	4	12.15	0.013
Dislocation / Subluxation	35	47.65	0.068
Adverse Soft Tissue Reaction	2	2.70	1
Infection	26	39.10	0.036
Aseptic Loosening - Stem	10	20.09	0.018
Aseptic Loosening - Socket	18	38.52	<0.001
Periprosthetic Fracture Stem	26	36.39	0.095
Periprosthetic Fracture Socket	0	3.57	0.056
Malalignment Stem	1	4.19	0.14
Malalignment Socket	1	8.13	0.004
Wear Of Acetabular Component	6	9.71	0.329
Lysis Stem	2	5.71	0.14
Lysis Socket	5	8.06	0.373
Implant Fracture Stem	2	4.48	0.34
Implant Fracture Socket	1	0.97	0.623
Implant Fracture Head	2	0.75	0.173
Dissociation of Liner	1	1.91	1
Other / reason not recorded	2	5.13	0.259
Total Revised	120	191.41	<0.001

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

† 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 $p < 0.001$



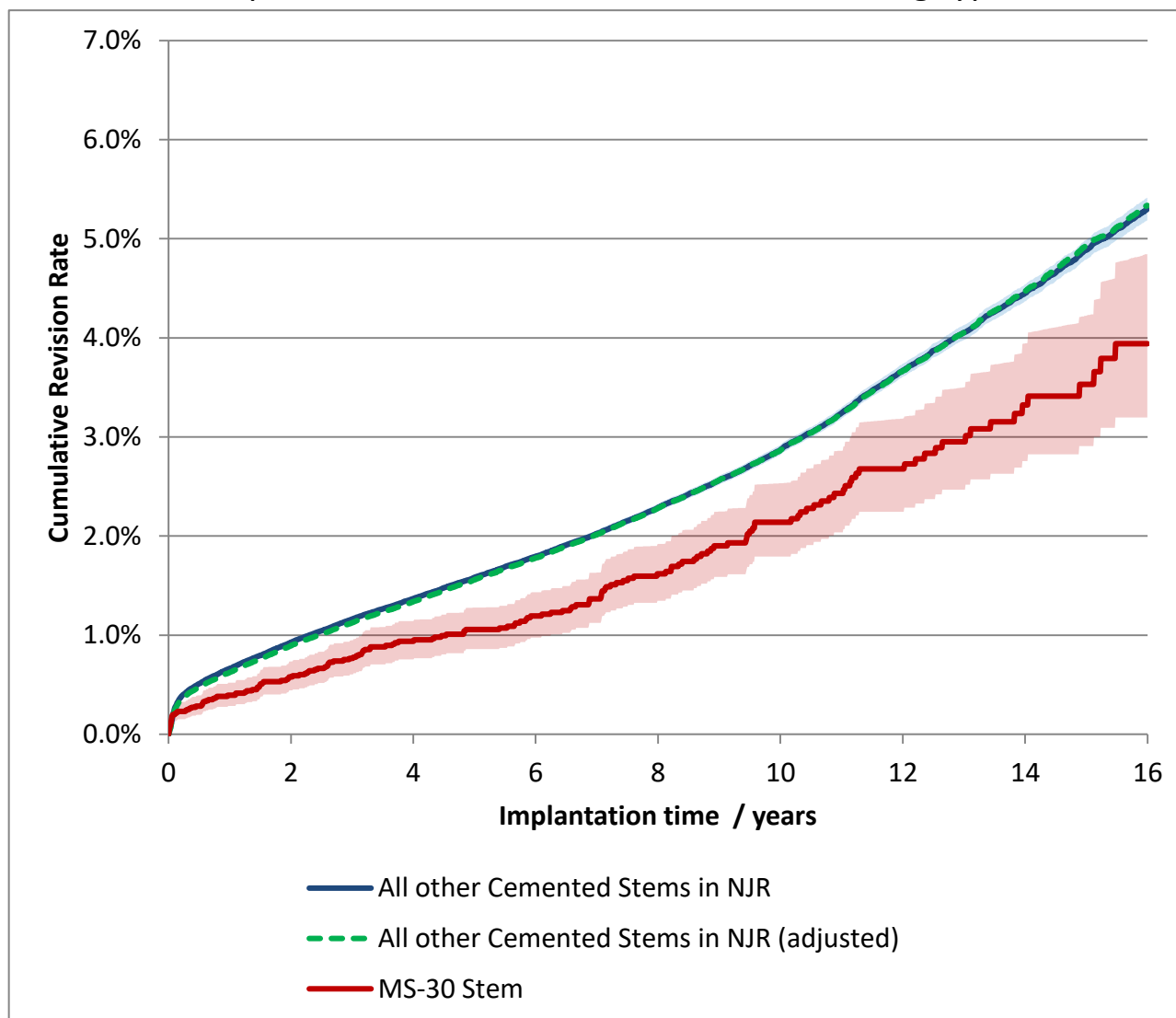
Components Revised	Number of procedures	MS-30 Stem	All other Cemented Stems in NJR
Femoral only	32	27%	23%
Acetabular only	27	23%	23%
Both femoral and acetabular	42	35%	44%
Neither femoral nor acetabular revision recorded *	19	16%	10%

* includes isolated head and/or liner exchange

Revision and Survivorship

Cumulative Revision Rate

Endpoint: All reasons for revision. All Bearing types



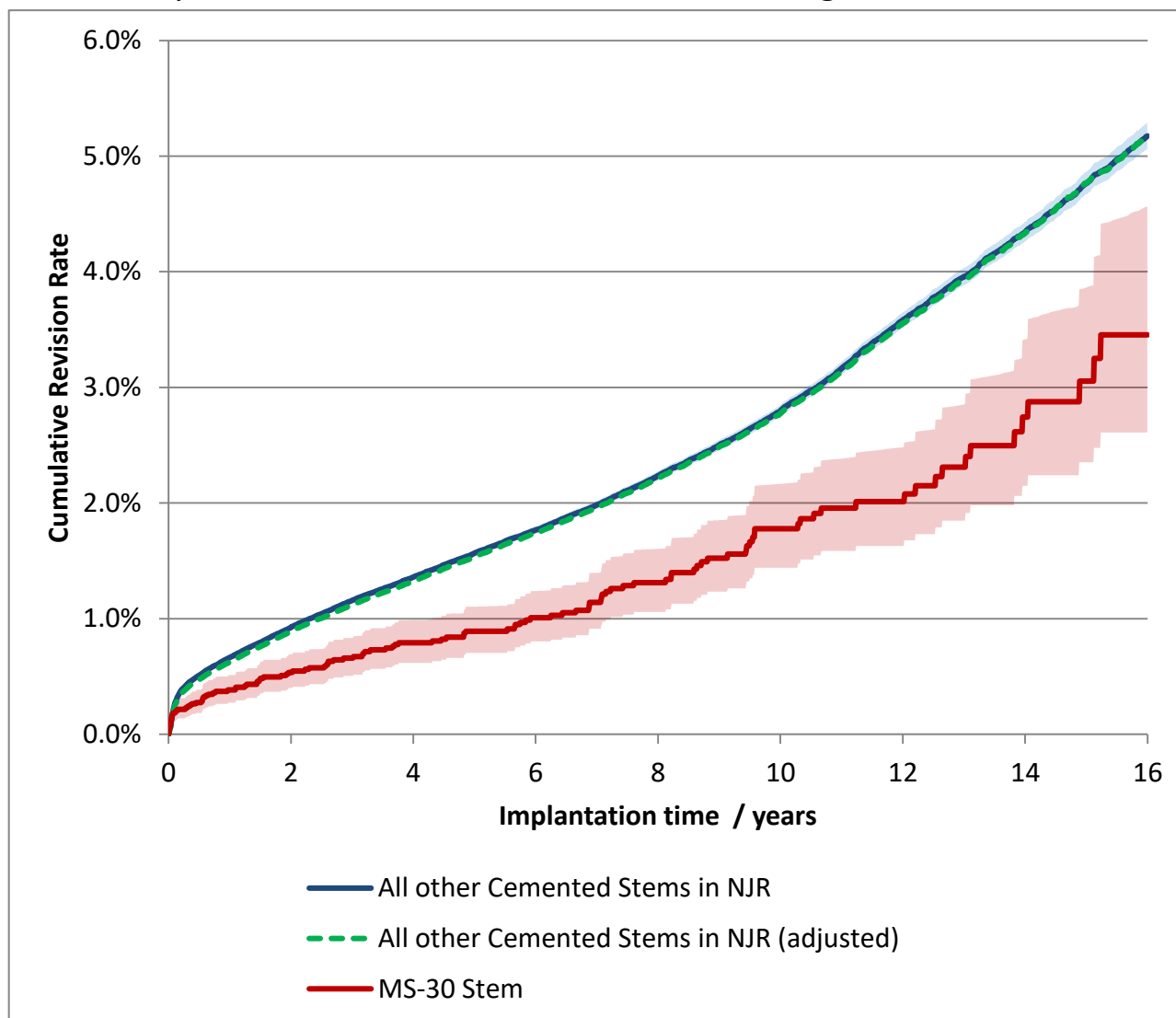
Cox Proportional Hazards model for revision risk ratio of MS-30 Stem / All other Cemented Stems in NJR, with endpoint as any revision.

Adjustment	Hazard Ratio (95% CI)	p-value
All bearings. Unadjusted.	0.72 (0.62 - 0.83)	<0.001
All bearings. Adjusted for age, gender, year cohort and indications.	0.72 (0.62 - 0.84)	<0.001

Revision and Survivorship

Cumulative Revision Rate

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



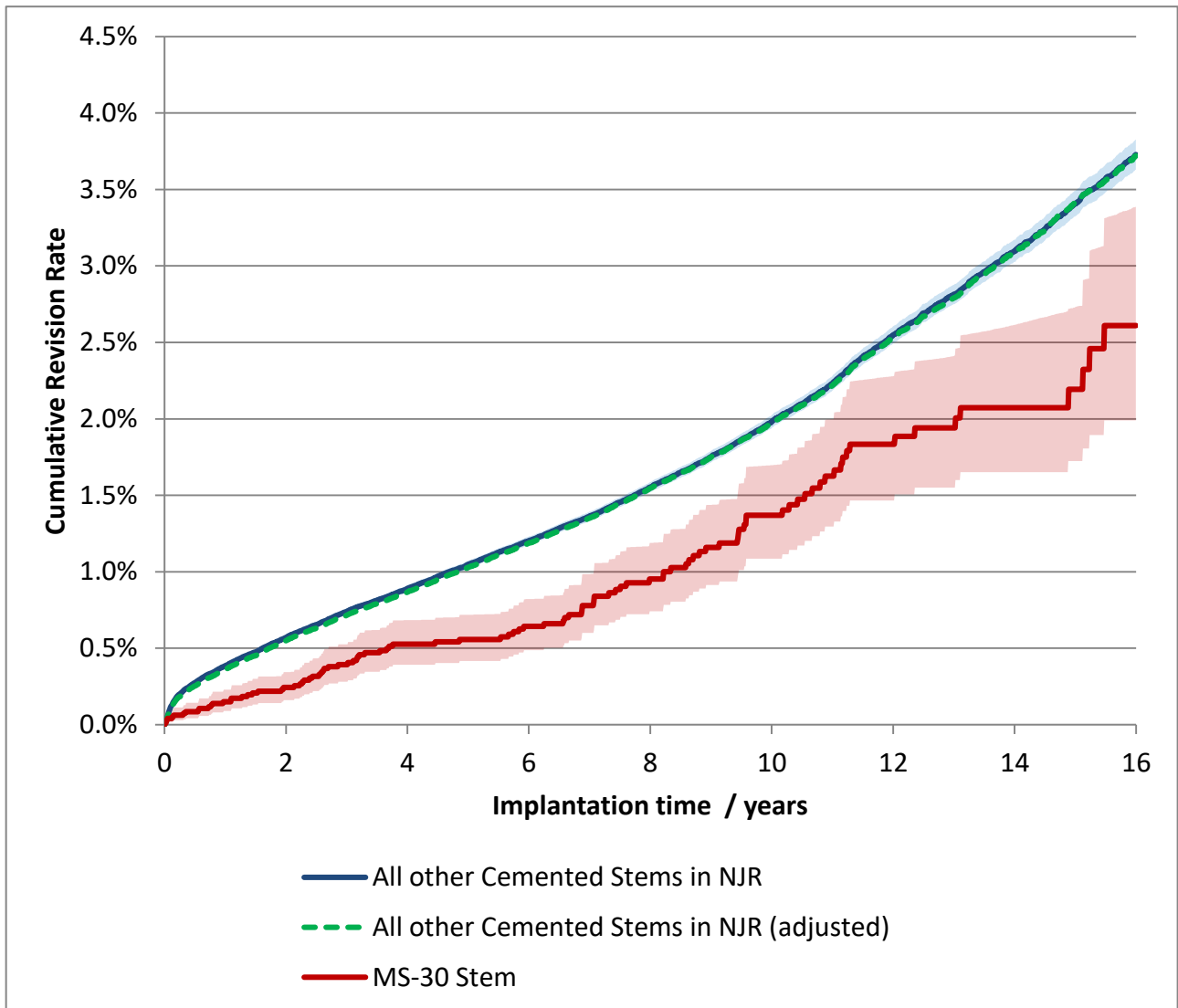
Cox Proportional Hazards model for revision risk ratio of MS-30 Stem / All other Cemented Stems in NJR, with endpoint as any revision.

Adjustment	Hazard Ratio (95% CI)	p-value
Excluding MoM, Unadjusted.	0.60 (0.50 - 0.72)	<0.001
Excluding MoM. Adjusted for age, gender, year cohort and indications.	0.62 (0.52 - 0.75)	<0.001

Revision and Survivorship

Cumulative Revision Rate

Endpoint: Femoral Revision. All Bearing types



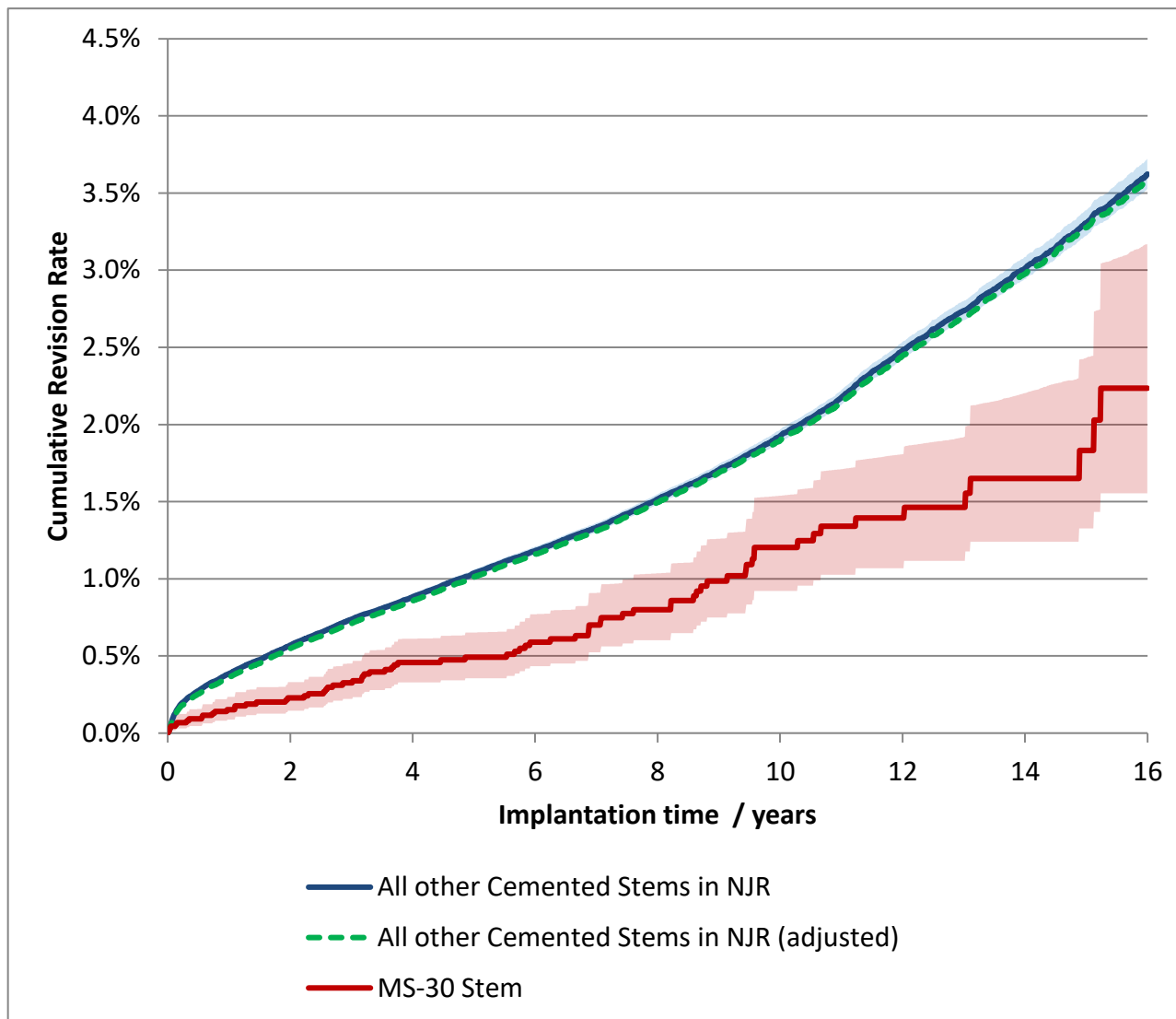
Cox Proportional Hazards model for revision risk ratio of MS-30 Stem / All other Cemented Stems in NJR, with endpoint as any revision.

Adjustment	Hazard Ratio (95% CI)	p-value
All bearings. Unadjusted.	0.64 (0.53 - 0.78)	<0.001
All bearings. Adjusted for age, gender, year cohort and indications.	0.65 (0.54 - 0.79)	<0.001

Revision and Survivorship

Cumulative Revision Rate

Endpoint: Femoral Revision. Excluding Metal-on-Metal



Cox Proportional Hazards model for revision risk ratio of MS-30 Stem / All other Cemented Stems in NJR, with endpoint as any revision.

Adjustment	Hazard Ratio (95% CI)	p-value
Excluding MoM. Unadjusted.	0.55 (0.44 - 0.69)	<0.001
Excluding MoM. Adjusted for age, gender, year cohort and indications.	0.58 (0.46 - 0.73)	<0.001

Revision and Survivorship

Cumulative Revision Rate

Endpoint: All revisions

Period /years	All Bearing types				Excluding Metal on Metal Bearings			
	At Risk	MS-30 Stem	All other Cemented Stems in NJR	All THR	At Risk	MS-30 Stem	All other Cemented Stems in NJR	All THR
0	9,586	-	-	-	8,818	-	-	-
1	8,902	0.4% (0.3% - 0.5%)	0.7% (0.6% - 0.7%)	0.8% (0.8% - 0.8%)	8,142	0.4% (0.3% - 0.5%)	0.7% (0.6% - 0.7%)	0.8% (0.7% - 0.8%)
2	8,274	0.6% (0.4% - 0.7%)	0.9% (0.9% - 0.9%)	1.1% (1.1% - 1.1%)	7,530	0.5% (0.4% - 0.7%)	0.9% (0.9% - 0.9%)	1.1% (1.0% - 1.1%)
3	7,750	0.8% (0.6% - 0.9%)	1.2% (1.1% - 1.2%)	1.4% (1.4% - 1.4%)	7,031	0.7% (0.5% - 0.8%)	1.2% (1.1% - 1.2%)	1.3% (1.3% - 1.3%)
4	7,011	0.9% (0.8% - 1.1%)	1.4% (1.3% - 1.4%)	1.7% (1.7% - 1.7%)	6,312	0.8% (0.6% - 1.0%)	1.4% (1.3% - 1.4%)	1.5% (1.5% - 1.5%)
5	6,320	1.1% (0.9% - 1.3%)	1.6% (1.6% - 1.6%)	2.0% (2.0% - 2.0%)	5,638	0.9% (0.7% - 1.1%)	1.6% (1.5% - 1.6%)	1.7% (1.7% - 1.8%)
6	5,595	1.2% (1.0% - 1.4%)	1.8% (1.8% - 1.8%)	2.3% (2.3% - 2.4%)	4,933	1.0% (0.8% - 1.2%)	1.8% (1.7% - 1.8%)	1.9% (1.9% - 2.0%)
7	4,873	1.4% (1.1% - 1.6%)	2.0% (2.0% - 2.1%)	2.7% (2.7% - 2.7%)	4,230	1.1% (0.9% - 1.4%)	2.0% (1.9% - 2.0%)	2.2% (2.1% - 2.2%)
8	4,154	1.6% (1.3% - 1.9%)	2.3% (2.2% - 2.3%)	3.1% (3.0% - 3.1%)	3,534	1.3% (1.1% - 1.6%)	2.2% (2.2% - 2.3%)	2.4% (2.4% - 2.4%)
9	3,552	1.9% (1.6% - 2.2%)	2.6% (2.5% - 2.6%)	3.4% (3.4% - 3.5%)	2,956	1.5% (1.2% - 1.9%)	2.5% (2.5% - 2.5%)	2.7% (2.6% - 2.7%)
10	3,006	2.1% (1.8% - 2.5%)	2.9% (2.8% - 2.9%)	3.8% (3.8% - 3.9%)	2,440	1.8% (1.4% - 2.2%)	2.8% (2.7% - 2.8%)	2.9% (2.9% - 3.0%)
11	2,459	2.4% (2.0% - 2.9%)	3.2% (3.2% - 3.3%)	4.3% (4.2% - 4.3%)	1,925	2.0% (1.6% - 2.4%)	3.2% (3.1% - 3.2%)	3.3% (3.2% - 3.3%)
12	1,945	2.7% (2.2% - 3.2%)	3.7% (3.6% - 3.7%)	4.7% (4.7% - 4.8%)	1,458	2.0% (1.6% - 2.5%)	3.6% (3.5% - 3.6%)	3.7% (3.6% - 3.7%)
13	1,510	2.9% (2.5% - 3.5%)	4.1% (4.0% - 4.1%)	5.2% (5.2% - 5.3%)	1,083	2.3% (1.8% - 2.9%)	4.0% (3.9% - 4.0%)	4.1% (4.0% - 4.1%)
14	1,104	3.3% (2.8% - 3.9%)	4.5% (4.4% - 4.5%)	5.7% (5.6% - 5.8%)	749	2.7% (2.1% - 3.4%)	4.3% (4.3% - 4.4%)	4.5% (4.4% - 4.5%)
15	784	3.5% (2.9% - 4.2%)	4.9% (4.8% - 5.0%)	6.2% (6.1% - 6.3%)	522	3.1% (2.4% - 3.9%)	4.8% (4.7% - 4.9%)	4.9% (4.8% - 5.0%)

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	MS-30 Stem	All other Cemented Stems in NJR	All THR	At Risk	MS-30 Stem	All other Cemented Stems in NJR	All THR
0	9,586	-	-	-	8,818	-	-	-
1	8,902	0.2% (0.1% - 0.2%)	0.4% (0.4% - 0.4%)	0.5% (0.5% - 0.5%)	8,142	0.2% (0.1% - 0.2%)	0.4% (0.4% - 0.4%)	0.5% (0.4% - 0.5%)
2	8,274	0.2% (0.2% - 0.3%)	0.6% (0.6% - 0.6%)	0.7% (0.7% - 0.7%)	7,530	0.2% (0.1% - 0.3%)	0.6% (0.6% - 0.6%)	0.7% (0.6% - 0.7%)
3	7,750	0.4% (0.3% - 0.5%)	0.7% (0.7% - 0.8%)	0.9% (0.9% - 0.9%)	7,031	0.3% (0.2% - 0.5%)	0.7% (0.7% - 0.8%)	0.8% (0.8% - 0.8%)
4	7,011	0.5% (0.4% - 0.7%)	0.9% (0.9% - 0.9%)	1.1% (1.1% - 1.1%)	6,312	0.5% (0.3% - 0.6%)	0.9% (0.9% - 0.9%)	1.0% (0.9% - 1.0%)
5	6,320	0.6% (0.4% - 0.7%)	1.0% (1.0% - 1.1%)	1.3% (1.3% - 1.3%)	5,638	0.5% (0.4% - 0.7%)	1.0% (1.0% - 1.1%)	1.1% (1.1% - 1.1%)
6	5,595	0.6% (0.5% - 0.8%)	1.2% (1.2% - 1.2%)	1.5% (1.5% - 1.5%)	4,933	0.6% (0.4% - 0.8%)	1.2% (1.2% - 1.2%)	1.3% (1.2% - 1.3%)
7	4,873	0.8% (0.6% - 1.0%)	1.4% (1.3% - 1.4%)	1.7% (1.7% - 1.8%)	4,230	0.7% (0.5% - 0.9%)	1.3% (1.3% - 1.4%)	1.4% (1.4% - 1.4%)
8	4,154	1.0% (0.7% - 1.2%)	1.6% (1.5% - 1.6%)	2.0% (2.0% - 2.0%)	3,534	0.8% (0.6% - 1.0%)	1.5% (1.5% - 1.5%)	1.6% (1.6% - 1.6%)
9	3,552	1.2% (0.9% - 1.4%)	1.8% (1.7% - 1.8%)	2.3% (2.2% - 2.3%)	2,956	1.0% (0.7% - 1.3%)	1.7% (1.7% - 1.7%)	1.8% (1.7% - 1.8%)
10	3,006	1.4% (1.1% - 1.7%)	2.0% (1.9% - 2.0%)	2.5% (2.5% - 2.6%)	2,440	1.2% (0.9% - 1.5%)	1.9% (1.9% - 2.0%)	2.0% (1.9% - 2.0%)
11	2,459	1.6% (1.3% - 2.0%)	2.2% (2.2% - 2.3%)	2.8% (2.8% - 2.9%)	1,925	1.3% (1.0% - 1.7%)	2.2% (2.1% - 2.2%)	2.2% (2.2% - 2.2%)
12	1,945	1.8% (1.5% - 2.3%)	2.5% (2.5% - 2.6%)	3.2% (3.1% - 3.2%)	1,458	1.4% (1.1% - 1.8%)	2.5% (2.4% - 2.5%)	2.5% (2.4% - 2.5%)
13	1,510	1.9% (1.5% - 2.4%)	2.8% (2.8% - 2.9%)	3.5% (3.5% - 3.6%)	1,083	1.5% (1.1% - 1.9%)	2.7% (2.7% - 2.8%)	2.7% (2.7% - 2.8%)
14	1,104	2.1% (1.7% - 2.6%)	3.1% (3.0% - 3.2%)	3.9% (3.8% - 3.9%)	749	1.7% (1.2% - 2.2%)	3.0% (2.9% - 3.1%)	3.0% (2.9% - 3.0%)
15	784	2.2% (1.7% - 2.7%)	3.4% (3.3% - 3.5%)	4.2% (4.2% - 4.3%)	522	1.8% (1.3% - 2.4%)	3.3% (3.2% - 3.4%)	3.3% (3.2% - 3.3%)

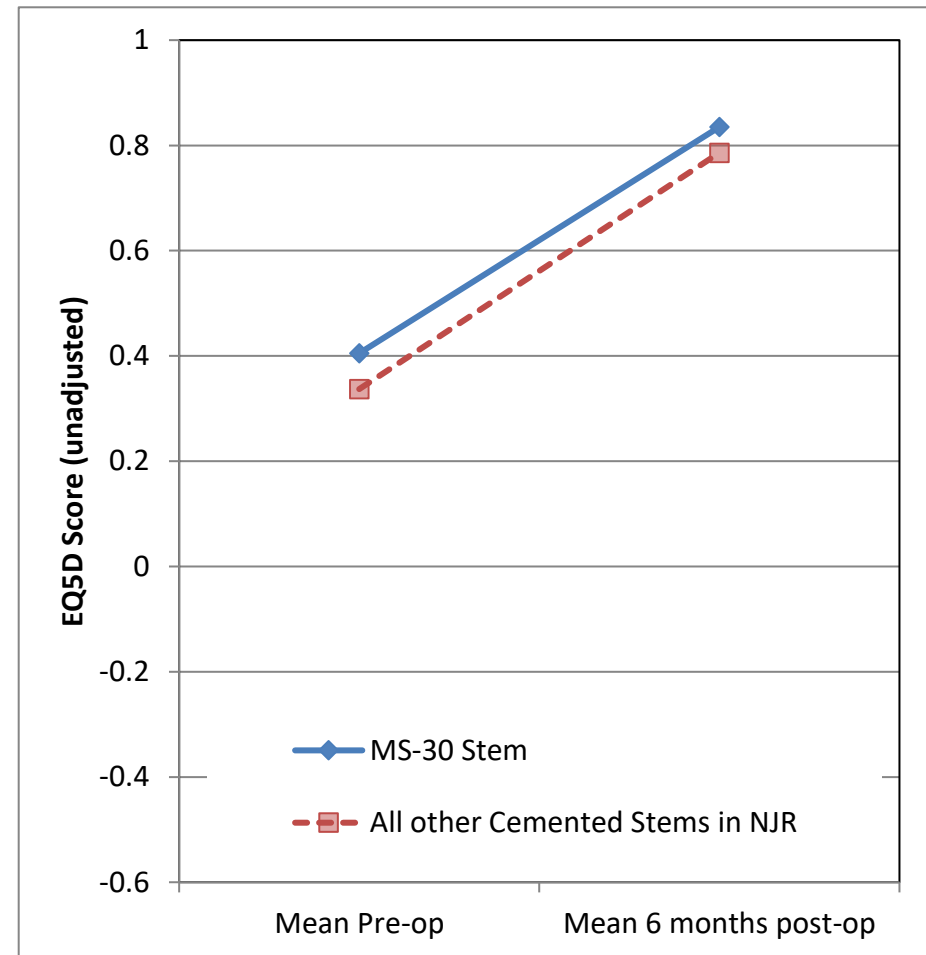
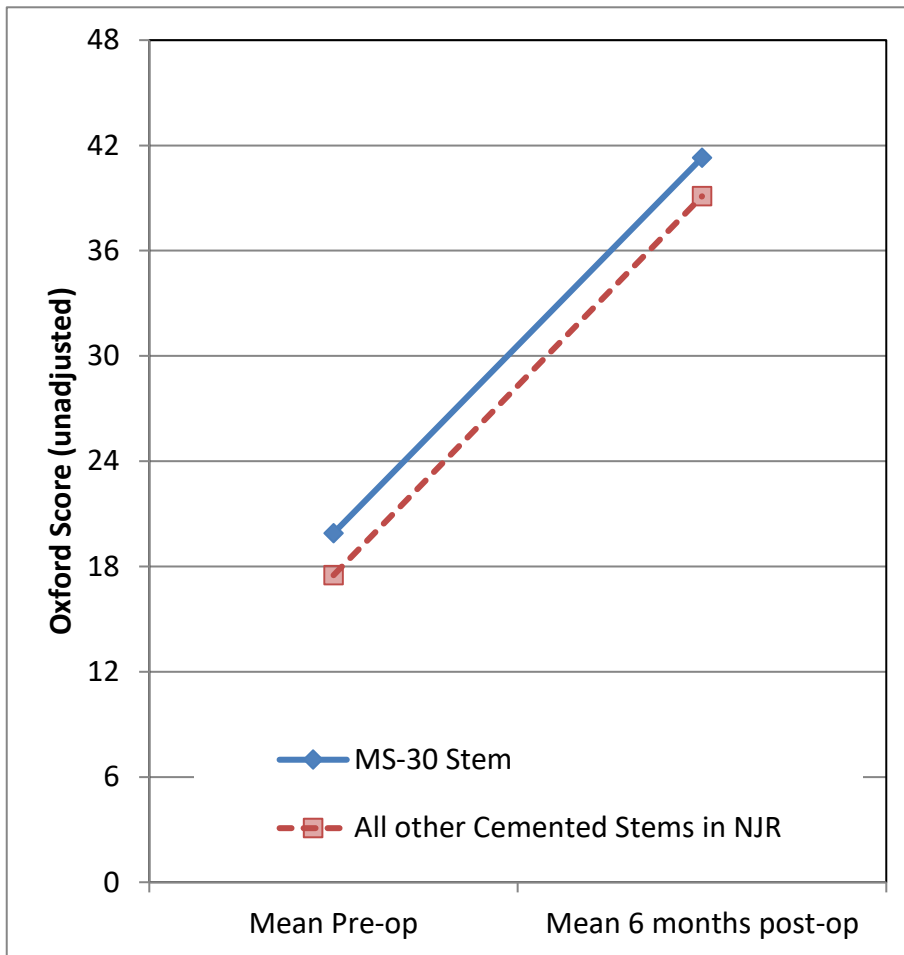
Cumulative revision rate with 95% confidence intervals

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

PROMs Analysis

Patient Reported Outcomes

Comprising PROMs data up to and including: 31/12/2020



Patient Reported Outcomes

PROMs Analysis

Comprising PROMs data up to and including: 31/12/2020

Oxford Hip Score (0 - 48)	MS-30 Stem	All other Cemented Stems in NJR	All THR in NJR
Paired Records	2,115	191,541	350,454
PreOp score	19.9 (19.5 - 20.2)	17.5 (17.4 - 17.5)	17.9 (17.9 - 18.0)
6 month score	41.3 (41.0 - 41.6)	39.1 (39.1 - 39.2)	39.6 (39.5 - 39.6)
6 month score (adjusted)	40.4 (40.1 - 40.7)	39.5 (39.5 - 39.5)	39.6 (39.5 - 39.6)
Health gain	21.4 (21.0 - 21.8)	21.6 (21.6 - 21.7)	21.6 (21.6 - 21.7)
Health gain (adjusted)	22.4 (22.1 - 22.7)	21.6 (21.5 - 21.6)	21.6 (21.6 - 21.7)
p value (adjusted health gain)	< 0.001		
Score Improved	98.2%	97.4%	97.3%

EQ-5D Index (-0.59 - 1.00)	MS-30 Stem	All other Cemented Stems in NJR	All THR in NJR
Paired Records	1,949	175,938	323,116
PreOp score	0.405 (0.391 - 0.419)	0.337 (0.336 - 0.339)	0.353 (0.352 - 0.354)
6 month score	0.835 (0.826 - 0.845)	0.786 (0.785 - 0.787)	0.795 (0.794 - 0.796)
6 month score (adjusted)	0.812 (0.803 - 0.821)	0.793 (0.792 - 0.794)	0.795 (0.794 - 0.796)
Health gain	0.430 (0.416 - 0.445)	0.449 (0.447 - 0.450)	0.442 (0.441 - 0.443)
Health gain (adjusted)	0.459 (0.450 - 0.467)	0.440 (0.439 - 0.441)	0.442 (0.441 - 0.443)
p value (adjusted health gain)	< 0.001		
Score Improved	91.5%	89.8%	89.7%

EQ-VAS (0 - 100)	MS-30 Stem	All other Cemented Stems in NJR	All THR in NJR
Paired Records	1,876	168,781	310,928
PreOp score	66.9 (66.0 - 67.8)	64.3 (64.2 - 64.4)	64.7 (64.7 - 64.8)
6 month score	79.2 (78.5 - 80.0)	76.3 (76.2 - 76.4)	77.0 (77.0 - 77.1)
6 month score (adjusted)	77.8 (77.2 - 78.5)	77.0 (76.9 - 77.0)	77.0 (77.0 - 77.1)
Health gain	12.3 (11.4 - 13.3)	12.0 (11.9 - 12.1)	12.3 (12.2 - 12.4)
Health gain (adjusted)	13.1 (12.4 - 13.8)	12.2 (12.1 - 12.3)	12.3 (12.3 - 12.4)
p value (adjusted health gain)	0.068		
Score Improved	68.0%	65.8%	66.6%

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

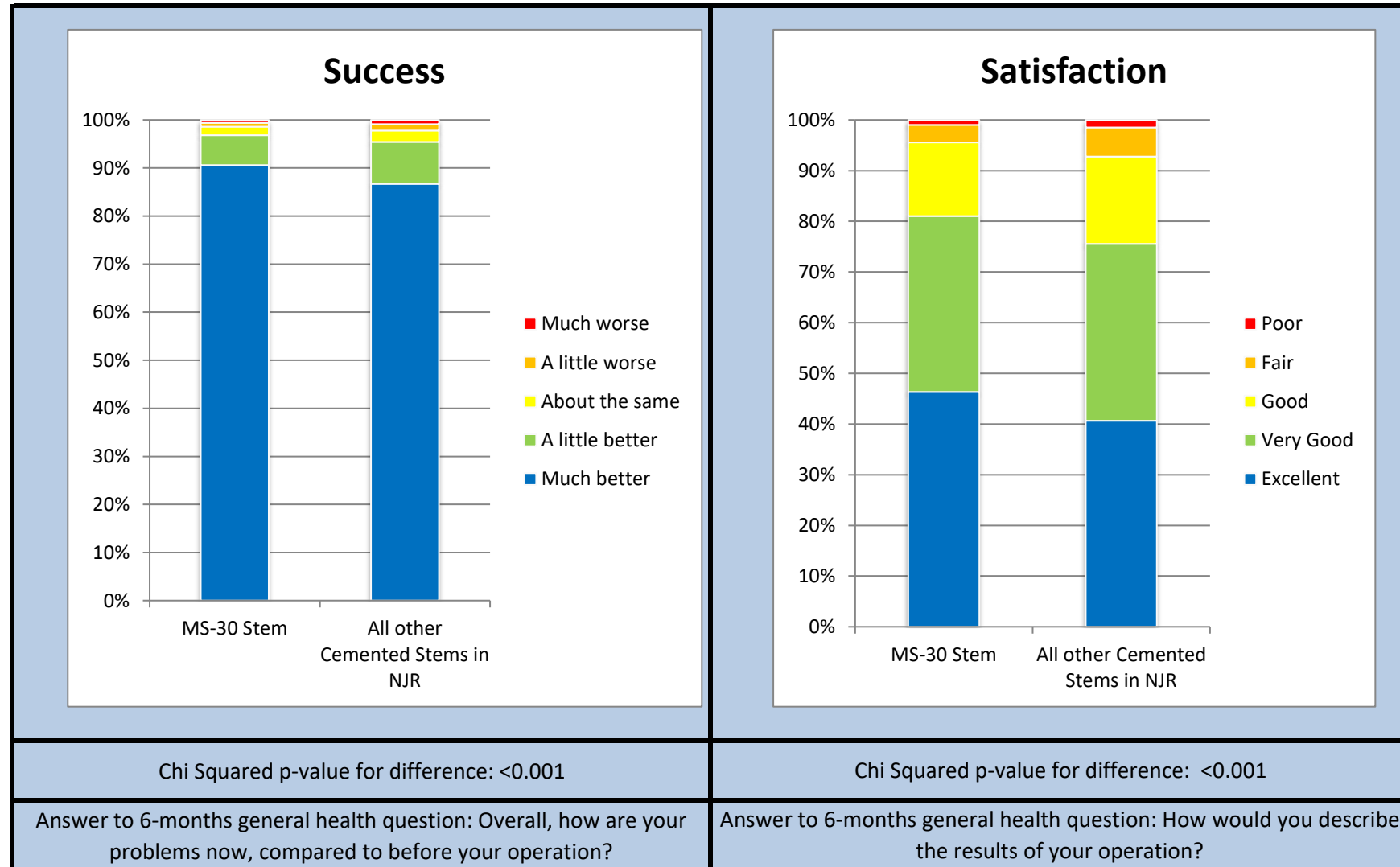
Figures in parentheses represent the 95% confidence interval for the mean

Summary Report for:

MS-30 Stem

Responses are not case mix adjusted

Patient Reported Outcomes



Chi Squared p-value for difference: <math><0.001</math>

Chi Squared p-value for difference: <math><0.001</math>

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?

Patient Reported Outcomes

Success

Response	MS-30 Stem	All other Cemented Stems in NJR
Much better	1918	168715
A little better	132	17011
About the same	37	4626
A little worse	17	2590
Much worse	13	1686

Answer to 6-months general health question:

"Overall, how are your problems now, compared to before your operation?"

Satisfaction

Response	MS-30 Stem	All other Cemented Stems in NJR
Excellent	977	78967
Very Good	731	67870
Good	306	33451
Fair	73	11093
Poor	21	2943

Answer to 6-months general health question:

"How would you describe the results of your operation?"

Disclaimer

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Appendix A: Component List

Catalogue Number	Description	Number Implanted
14320620	BALL HEAD P20 Ñ 32 mm / M	727
14320720	BALL HEAD P20 Ñ 32 mm / L	105
17.28.05	28/SHORT SULOX CERAMIC HEAD	125
17.28.06	28/MEDIUM SULOX CERAMIC HEAD	968
17.28.07	28/LONG SULOX CERAMIC HEAD	60
17.32.05	SULOX BALL HEAD 32/S	59
17.32.06	SULOX BALL HEAD 32/M	863
17.32.07	SULOX BALL HEAD 32/L	65
19.28.05	METASUL BALL HEAD 28/S	125
19.28.06	METASUL BALL HEAD 28/M	399
19.28.07	METASUL BALL HEAD 28/ L	68
19.32.05	Metasul 32mm short (-4mm) head	6
19.32.06	Metasul Head 32/0 M tAPER 12/14	59
19.32.07	Metasul 32mm large head	13
19.32.08	Metasul Head 32/+8 XL Taper 12/14 CoCrMo	3
302205	22MM/BALL HEAD S30 SHORT	11
302206	22MM/BALL HEAD S30 MEDIUM	17
302207	22MM/BALL HEAD S30 LONG	1
302805	BALL HEAD S30 28mm/S	118
302806	28mm/MEDIUM S30 BALL HEAD	379
302807	28mm/LONG S30 BALL HEAD	67
303205	BALL HEAD S30 32mm/S	47
303206	BALL HEAD S30 32mm/M	698
303207	BALL HEAD S30 32mm/L	55
407.0101	Cerasul Ball Head 28 S	1
407.0102	Cerasul Ball Head 28 M	20
6428-28-02	Alumina ceramic femoral head 12/14 taper 28mm +0mm	6
6428-28-03	Alumina ceramic femoral head 12/14 taper 28mm +3.5mm	1
6428-32-01	Alumina ceramic femoral head 12/14 taper 32mm -3.5mm	1
6428-32-02	Alumina ceramic femoral head 12/14 taper 32mm +0mm	13
8018-22-02	0 x 22mm Diameter Neck Length	1
8018-22-20	22.25mm Diameter -2mm Neck Length	2
8018-26-02	26mm Diameter 0mm Neck Length	2
8018-26-03	26mm Diameter +3.5mm Neck Length	4
8018-28-01	28mm Diameter -3.5mm Neck Length	10
8018-28-02	28mm Diameter 0mm Neck Length	13
8018-28-03	28mm Diameter +3.5mm Neck Length	4
8018-28-14	28mm Diameter +7mm Neck Length	3
8018-32-01	32mm Diameter -3.5mm Neck Length	8
8018-32-02	32mm Diameter 0mm Neck Length	29
8018-32-03	32mm Diameter +3.5mm Neck Length	3
8018-36-01	Modular head 12/14 taper-36mm -3.5	17
8018-36-02	Modular head 12/14 taper-36mm 0	98
8018-36-03	Modular head 12/14 taper-36mm +3.5	24
8018-36-04	Modular head 12/14 taper -36mm +7	1
8018-40-03	Modular head 12/14 taper 40mm +3.5	1

