

## 2021 Annual Report – Hip, Knee and Shoulder Arthroplasty

### ERRATUM #2

Amended 27 October 2021

#### Erratum for the PRINTED version of the 2021 Annual Report – Hip Knee and Shoulder Arthroplasty

Due to a catalogue range missing the attribute of mini stem text, tables and figures were incorrect on pages 107, 112 and 113

#### ORIGINAL TEXT

##### MINI STEMS

The Registry defines a mini stem as a short cementless femoral stem where fixation is designed to be entirely metaphyseal. These stems may enable femoral neck sparing.

There have been 5,442 procedures using a mini stem prosthesis undertaken for osteoarthritis. This represents <1.5% of all primary total conventional hip procedures. There were 1,045 procedures recorded in 2020 using a mini stem prosthesis. This is an increase of 13.8% compared to 2019. The 10 year cumulative percent revision for primary total conventional

hip replacement using a mini stem is 2.9% compared to 4.4% for other femoral stems. Mini stems have a reduced rate of revision after 6 months (Table HT23 and Figure HT22). There is an increased cumulative incidence of fracture and loosening for procedures using a mini stem compared to other femoral stems at 1 year (0.7% compared to 0.3%, and 0.5% compared to 0.2%, respectively) (Figure HT23). The types of revision are presented in Table HT24. The Registry has information on 7 different mini stem prostheses. Rates of revision vary depending on the type of prosthesis (Table HT25).

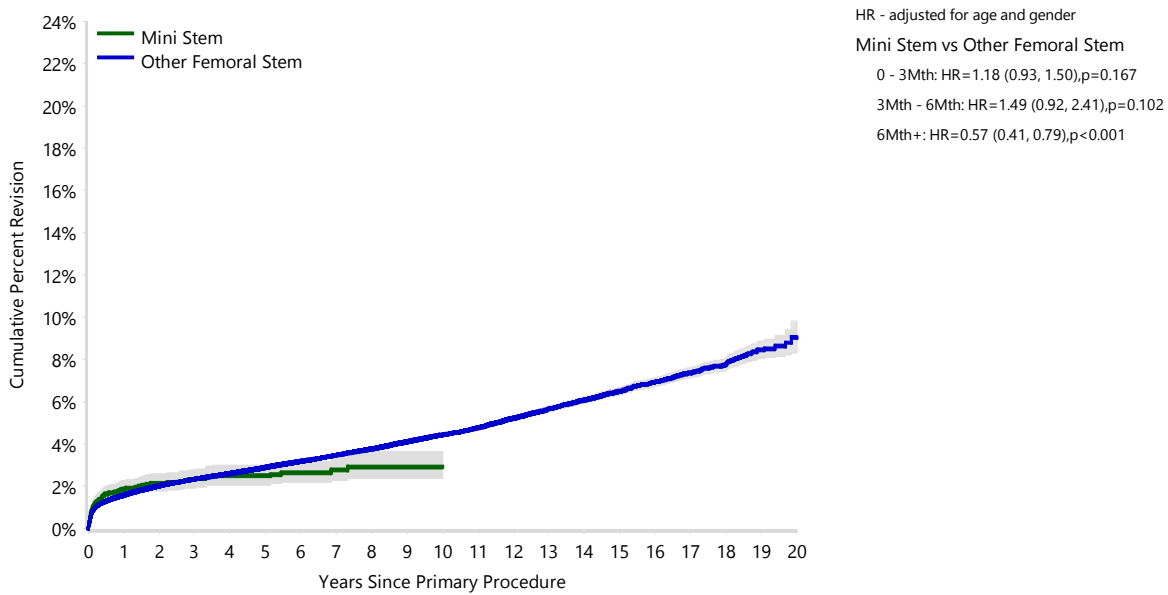
EXCERPT FROM ORIGINAL TABLES AND FIGURES

**Table HT23 Cumulative Percent Revision of Primary Total Conventional Hip Replacement by Stem Type (Primary Diagnosis OA)**

Stem Type	N Revised	N Total	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs
Mini Stem	121	5442	1.9 (1.5, 2.3)	2.3 (1.9, 2.8)	2.5 (2.1, 3.0)	2.9 (2.4, 3.6)		
Other Femoral Stem	11907	363392	1.6 (1.5, 1.6)	2.3 (2.3, 2.4)	2.9 (2.8, 3.0)	4.4 (4.3, 4.5)	6.5 (6.3, 6.7)	9.0 (8.3, 9.8)
<b>TOTAL</b>	<b>12028</b>	<b>368834</b>						

Note: All procedures using metal/metal prostheses have been excluded  
 Restricted to modern prostheses

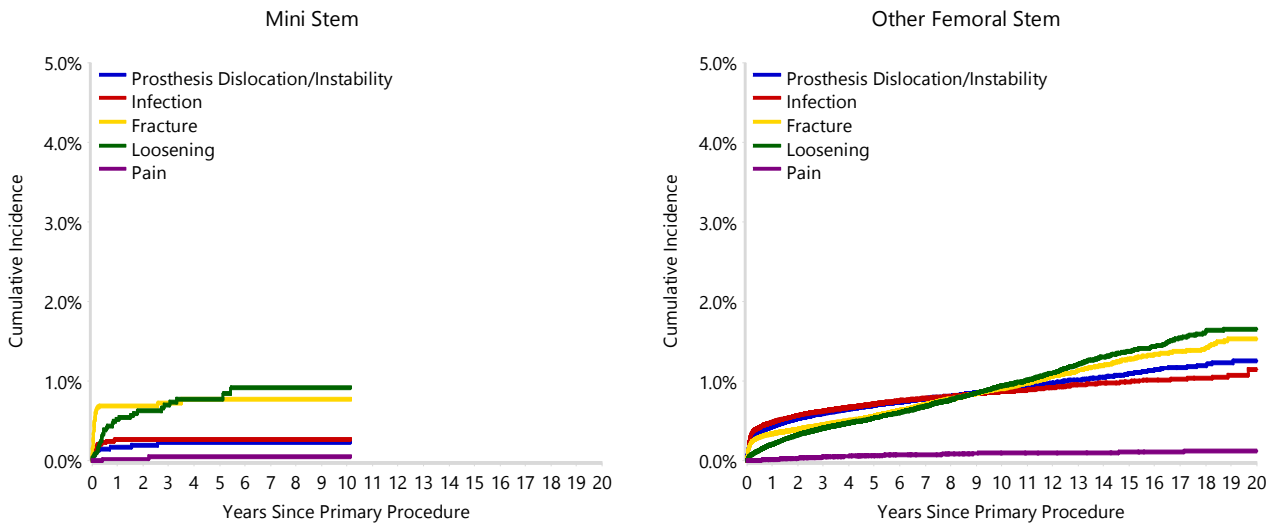
**Figure HT22 Cumulative Percent Revision of Primary Total Conventional Hip Replacement by Stem Type (Primary Diagnosis OA)**



Number at Risk	0 Yr	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs
Mini Stem	5442	4296	2496	1430	64	0	0
Other Femoral Stem	363392	323066	248694	181551	68262	17085	266

Note: All procedures using metal/metal prostheses have been excluded  
 Restricted to modern prostheses

**Table HT23 Cumulative Incidence Revision Diagnosis of Primary Total Conventional Hip Replacement by Stem Type (Primary Diagnosis OA)**



Note: All procedures using metal/metal prostheses have been excluded  
Restricted to modern prostheses

**Table HT24 Primary Total Conventional Hip Replacement by Type of Revision and Stem Type (Primary Diagnosis OA)**

Type of Revision	Number	Mini Stem		Other Femoral Stem		
		% Primaries Revised	% Revisions	Number	% Primaries Revised	% Revisions
Femoral Component	59	1.1	48.8	3859	1.1	32.4
Head/Insert	17	0.3	14.0	2893	0.8	24.3
Acetabular Component	22	0.4	18.2	2310	0.6	19.4
THR (Femoral/Acetabular)	8	0.1	6.6	1329	0.4	11.2
Head Only	9	0.2	7.4	595	0.2	5.0
Cement Spacer	3	0.1	2.5	481	0.1	4.0
Minor Components	1	0.0	0.8	216	0.1	1.8
Other	2	0.0	1.7	224	0.1	1.9
<b>N Revision</b>	<b>121</b>	<b>2.2</b>	<b>100.0</b>	<b>11907</b>	<b>3.3</b>	<b>100.0</b>
<b>N Primary</b>	<b>5442</b>			<b>363392</b>		

Note: All procedures using metal/metal prostheses have been excluded  
Restricted to modern prostheses

**Table HT25 Cumulative Percent Revision of Primary Total Conventional Hip Replacement using a Mini Stem by Femoral Component (Primary Diagnosis OA)**

Femoral Component	N Revised	N Total	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs
Collo-MIS	0	12	0.0 (0.0, 0.0)	0.0 (0.0, 0.0)	0.0 (0.0, 0.0)			
Metha	2	32	3.1 (0.4, 20.2)	6.4 (1.6, 23.1)	6.4 (1.6, 23.1)			
MiniHip	41	1202	2.5 (1.7, 3.5)	3.2 (2.3, 4.4)	3.6 (2.6, 5.0)			
MiniMax	19	361	4.5 (2.8, 7.3)					
Nanos	10	671	0.9 (0.4, 2.0)	1.2 (0.6, 2.4)	1.2 (0.6, 2.4)	1.6 (0.8, 2.9)		
Optimys	8	630	1.0 (0.4, 2.2)	1.2 (0.6, 2.5)	1.6 (0.8, 3.2)			
Taperloc Microplasty	41	2534	1.6 (1.2, 2.2)	1.9 (1.4, 2.6)	1.9 (1.4, 2.6)			
<b>TOTAL</b>	<b>121</b>	<b>5442</b>						

Note: All procedures using metal/metal prostheses have been excluded  
Restricted to modern prostheses

## CORRECTION

### MINI STEMS

The Registry defines a mini stem as a short cementless femoral stem where fixation is designed to be entirely metaphyseal. These stems may enable femoral neck sparing.

There have been 6,737 procedures using a mini stem prosthesis undertaken for osteoarthritis. This represents prosthesis <1.9% of all primary conventional hip procedures. There were 1,347 procedures recorded in 2020 using a mini stem prosthesis. This is an increase of 9.9% compared to 2019. The 10 year cumulative percent revision for primary total conventional hip

replacement using a mini stem is 3.0% compared to 4.4% for other femoral stems. Mini stems have a reduced rate of revision after 6 months (Table HT23 and Figure HT22). There is an increased cumulative incidence of fracture and loosening for procedures using a mini stem compared to other femoral stems at 1 year (0.6% compared to 0.3%, and 0.4% compared to 0.2%, respectively) (Figure HT23). The types of revision are presented in Table HT24. The Registry has information on 7 different mini stem prostheses. Rates of revision vary depending on the type of prosthesis (Table HT25).

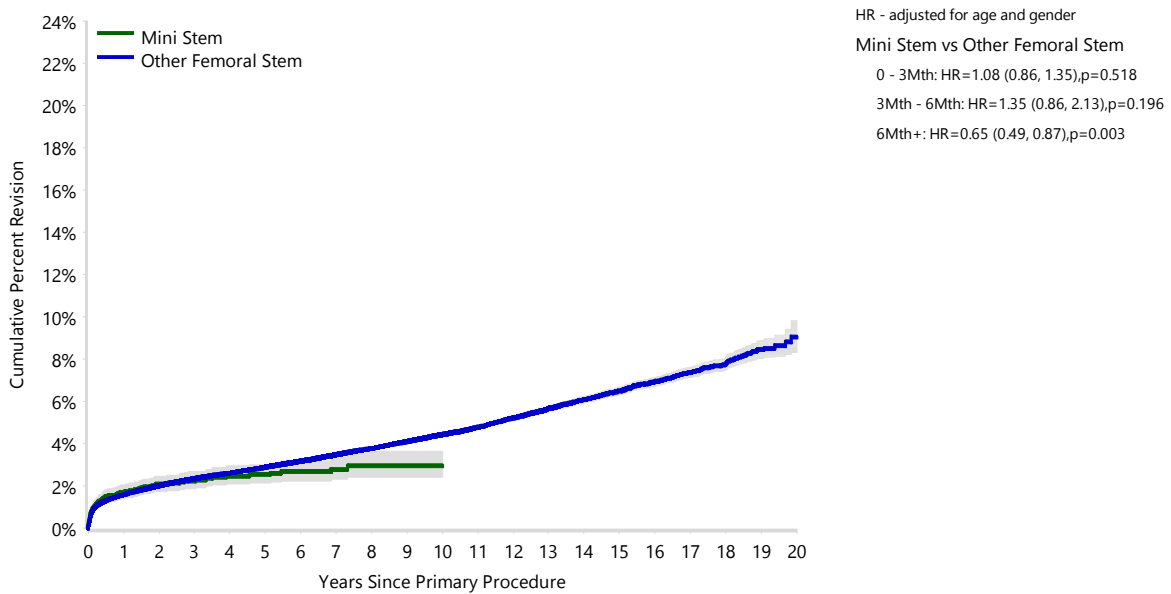
EXCERPT FROM CORRECTED TABLES & FIGURES

**Table HT23 Cumulative Percent Revision of Primary Total Conventional Hip Replacement by Stem Type (Primary Diagnosis OA)**

Stem Type	N Revised	N Total	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs
Mini Stem	144	6737	1.7 (1.4, 2.1)	2.3 (1.9, 2.7)	2.5 (2.1, 3.0)	3.0 (2.4, 3.6)		
Other Femoral Stem	11884	362097	1.6 (1.5, 1.6)	2.3 (2.3, 2.4)	2.9 (2.8, 3.0)	4.4 (4.3, 4.5)	6.5 (6.3, 6.7)	9.0 (8.3, 9.8)
<b>TOTAL</b>	<b>12028</b>	<b>368834</b>						

Note: All procedures using metal/metal prostheses have been excluded  
 Restricted to modern prostheses

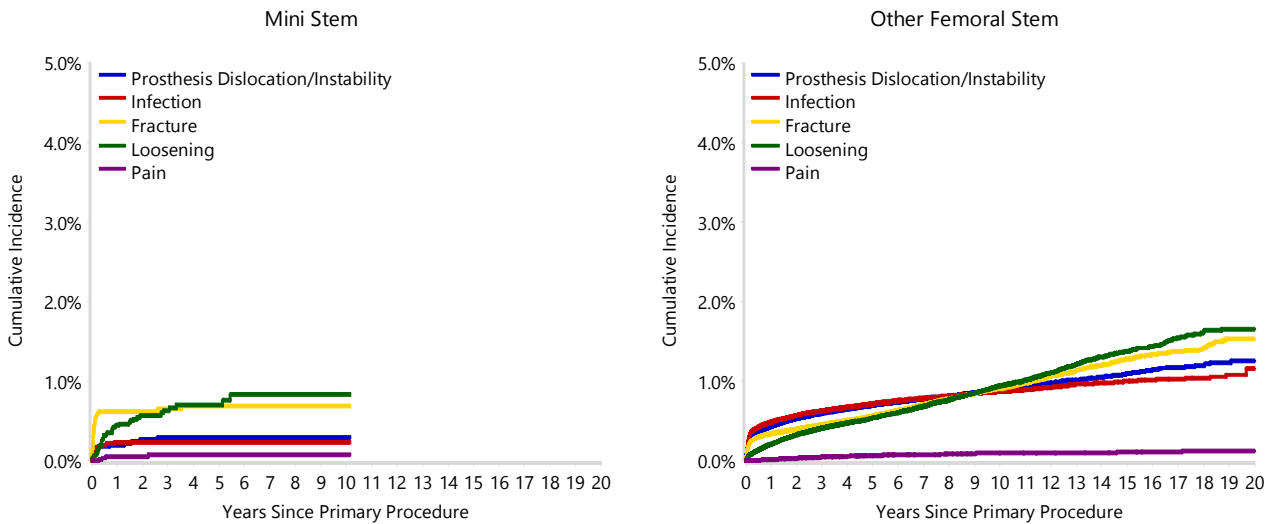
**Figure HT22 Cumulative Percent Revision of Primary Total Conventional Hip Replacement by Stem Type (Primary Diagnosis OA)**



Number at Risk	0 Yr	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs
Mini Stem	6737	5277	2930	1531	64	0	0
Other Femoral Stem	362097	322085	248260	181450	68262	17085	266

Note: All procedures using metal/metal prostheses have been excluded  
 Restricted to modern prostheses

**Figure HT23 Cumulative Incidence Revision Diagnosis of Primary Total Conventional Hip Replacement by Stem Type (Primary Diagnosis OA)**



Note: All procedures using metal/metal prostheses have been excluded  
Restricted to modern prostheses

**Table HT24 Primary Total Conventional Hip Replacement by Type of Revision and Stem Type (Primary Diagnosis OA)**

Type of Revision	Number	Mini Stem		Other Femoral Stem		
		% Primaries Revised	% Revisions	Number	% Primaries Revised	% Revisions
Femoral Component	67	1.0	46.5	3851	1.1	32.4
Head/Insert	19	0.3	13.2	2891	0.8	24.3
Acetabular Component	29	0.4	20.1	2303	0.6	19.4
THR (Femoral/Acetabular)	10	0.1	6.9	1327	0.4	11.2
Head Only	13	0.2	9.0	591	0.2	5.0
Cement Spacer	3	0.0	2.1	481	0.1	4.0
Minor Components	1	0.0	0.7	216	0.1	1.8
Other	2	0.0	1.4	224	0.1	1.9
<b>N Revision</b>	<b>144</b>	<b>2.1</b>	<b>100.0</b>	<b>11884</b>	<b>3.3</b>	<b>100.0</b>
<b>N Primary</b>	<b>6737</b>			<b>362097</b>		

Note: All procedures using metal/metal prostheses have been excluded  
Restricted to modern prostheses

**Table HT25 Cumulative Percent Revision of Primary Total Conventional Hip Replacement using a Mini Stem by Femoral Component (Primary Diagnosis OA)**

Femoral Component	N Revised	N Total	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs
Collo-MIS	0	12	0.0 (0.0, 0.0)	0.0 (0.0, 0.0)	0.0 (0.0, 0.0)			
Metha	2	32	3.1 (0.4, 20.2)	6.4 (1.6, 23.1)	6.4 (1.6, 23.1)			
MiniHip	41	1202	2.5 (1.7, 3.5)	3.2 (2.3, 4.4)	3.6 (2.6, 5.0)			
MiniMax	19	361	4.5 (2.8, 7.3)					
Nanos	10	671	0.9 (0.4, 2.0)	1.2 (0.6, 2.4)	1.2 (0.6, 2.4)	1.6 (0.8, 2.9)		
Optimys	31	1925	1.0 (0.7, 1.6)	1.7 (1.2, 2.5)	2.6 (1.7, 4.0)			
Taperloc Microplasty	41	2534	1.6 (1.2, 2.2)	1.9 (1.4, 2.6)	1.9 (1.4, 2.6)			
<b>TOTAL</b>	<b>144</b>	<b>6737</b>						

Note: All procedures using metal/metal prostheses have been excluded  
Restricted to modern prostheses