

# Australian Orthopaedic Association National Joint Replacement Registry

2025 SUPPLEMENTARY REPORT

Comparative  
Prosthesis  
Performance



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Australian  
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National  
Joint  
Replacement  
Registry

**Australian Orthopaedic Association National Joint Replacement Registry**

## **Comparative Prostheses Performance**

2025 Supplementary Report

Clinical Director:  
Professor Paul Smith  
**E:** [admin@aoanjrr.org.au](mailto:admin@aoanjrr.org.au)

AOANJRR  
SAHMRI Building  
North Terrace  
ADELAIDE SA 5000  
**T:** +61 8 8128 4280

Executive Manager:  
Sophie Corfield (Acting)  
Kathy Hill  
Roz Hanson (Feb - August 2025)  
**E:** [executivesupport@aoanjrr.org.au](mailto:executivesupport@aoanjrr.org.au)

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National Joint Replacement Registry**

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# Introduction

The purpose of this supplementary report is to ensure that the Registry provides updated 10, 15 and 20 year data on the comparative performance of all prostheses including those that are no longer used. This contrasts with the Annual Report Chapter "Ten, Fifteen, and Twenty Year Prosthesis Outcomes" which exclusively analyses modern prostheses only (i.e. prostheses that are still available and still used in 2024).

Surgeons at the Annual Report Workshop highlighted that there was ongoing interest in the comparative performance of all devices reported to the Registry and recommended its inclusion as a supplementary report. This supplementary report provides a historical perspective of prosthesis performance.

This report presents comparative performance information on hip and knee prostheses used for the treatment of osteoarthritis for the three different time periods irrespective of their use in 2024. Individual hip and knee prosthesis combinations with >350 procedures are reported.

The Registry is also reporting 10 year outcomes for primary total shoulder replacements. Individual humeral and glenoid prosthesis combinations are reported. A combination is included if >50 procedures have been reported to the Registry and the follow-up is  $\geq 10$  years. Those prostheses not used in 2024 are identified with an asterisk in each of the tables.

# Ten, Fifteen and Twenty Year Outcomes Comparative Performance

## Ten Year Outcomes

### HIP REPLACEMENT

There are 121 hip prosthesis combinations listed that have been used in >350 procedures and have data to at least 10 years. These listed combinations were used in 84.2% of all primary total conventional hip replacement procedures performed for osteoarthritis. The 10 year cumulative percent revision ranges from 2.1% to 46.5% (Table CP1).

### KNEE REPLACEMENT

There are 88 knee prosthesis combinations that have been used in >350 procedures and have data to at least 10 years. The listed combinations were used in 98.5% of all primary total knee replacement procedures performed for osteoarthritis. The 10 year cumulative percent revision ranges from 2.6% to 13.3% (Table CP2).

### SHOULDER REPLACEMENT

#### Total Stemmed Anatomic

There are 16 total stemmed anatomic shoulder prosthesis combinations that have been used in >50 procedures and have data to at least 10 years. The listed combinations were used in 88.8% of all primary total stemmed anatomic shoulder replacement procedures performed for osteoarthritis. The 10 year cumulative percent revision ranges from 3.9% to 39.1% (Table CP3).

#### Total Stemmed Reverse

There are 9 total reverse shoulder prosthesis combinations that have been used in >50 procedures and have data to at least 10 years. The listed combinations were used in 71.2% of all primary total reverse shoulder replacement procedures performed for any diagnosis. The 10 year cumulative percent revision ranges from 3.4% to 10.0% (Table CP4).

**Table CP1 Cumulative Percent Revision of Primary Total Conventional Hip Replacement Combinations with 10 Year Data  
(Primary Diagnosis OA)**

Femoral Component	Acetabular Component	Type of Revision								
		N Revised	N Total	THR	Femoral	Acetabular	Other	2 Yrs	5 Yrs	10 Yrs
ABGII	ABGII (Shell/Insert)*	105	853	21	56	19	9	1.8 (1.1, 2.9)	2.7 (1.8, 4.1)	6.6 (5.1, 8.6)
ABGII	ABGII*	379	2772	65	183	90	41	2.5 (2.0, 3.1)	4.1 (3.4, 5.0)	6.8 (5.9, 7.9)
ABGII	Trident (Shell)*	302	2439	17	188	39	58	3.4 (2.8, 4.2)	4.9 (4.1, 5.9)	8.5 (7.4, 9.7)
AMIStem H	Versafitcup CC	134	4313	14	81	17	22	1.6 (1.3, 2.0)	2.8 (2.3, 3.4)	5.3 (3.6, 7.9)
Accolade I	Mitch TRH*MoM	108	357	51	22	25	10	3.7 (2.1, 6.2)	10.3 (7.5, 14.0)	18.9 (15.1, 23.5)
Accolade I	Trident (Shell)*	610	8574	71	252	113	174	2.4 (2.1, 2.7)	3.8 (3.4, 4.2)	5.7 (5.2, 6.2)
Accolade I	Trident/Titanium (Shell)*	38	696	6	16	6	10	2.0 (1.2, 3.4)	2.9 (1.9, 4.5)	5.0 (3.6, 6.9)
Accolade II	Trident (Shell)	474	18666	45	162	74	193	2.2 (2.0, 2.4)	2.8 (2.6, 3.1)	3.9 (3.3, 4.6)
Adapter	Bionik*MoM	99	376	21	11	23	44	5.1 (3.3, 7.9)	15.0 (11.7, 19.2)	25.0 (20.8, 30.0)
Alloclassic	Allofit*	351	5170	42	153	61	95	1.8 (1.5, 2.2)	2.9 (2.5, 3.4)	5.0 (4.4, 5.7)
Alloclassic	Durom*MoM	109	547	30	16	48	15	3.4 (2.1, 5.3)	7.4 (5.5, 10.0)	16.3 (13.4, 19.9)
Alloclassic	Fitmore*	150	1709	16	74	20	40	4.2 (3.4, 5.3)	5.6 (4.6, 6.8)	7.5 (6.3, 8.9)
Alloclassic	Metasul*	26	371	6	2	12	6	2.2 (1.1, 4.3)	3.6 (2.1, 6.1)	5.1 (3.3, 8.1)
Alloclassic	Trabecular Metal (Shell)*	55	957	5	18	6	26	2.5 (1.7, 3.7)	4.0 (2.9, 5.5)	5.1 (3.9, 6.8)
Anthology	R3	285	8390	27	83	58	117	2.4 (2.1, 2.7)	2.9 (2.5, 3.3)	3.7 (3.3, 4.2)
Anthology	Reflection (Shell)*	42	909	4	16	14	8	2.3 (1.5, 3.5)	3.0 (2.1, 4.4)	4.5 (3.3, 6.2)
Apex	Fin II*	66	924	10	14	23	19	2.3 (1.5, 3.5)	3.4 (2.4, 4.8)	6.0 (4.6, 7.9)
Avenir	Continuum	68	1676	5	15	13	35	3.2 (2.5, 4.2)	3.7 (2.9, 4.7)	4.5 (3.5, 5.8)
Avenir	Trilogy*	15	553	1	6	2	6	1.1 (0.5, 2.4)	1.3 (0.6, 2.6)	2.9 (1.7, 4.9)
C-Stem	Duraloc*	97	894	13	26	14	44	2.8 (1.9, 4.2)	3.8 (2.7, 5.3)	6.9 (5.3, 8.9)
C-Stem	Elite Plus LPW*	25	367	11	5	9	0	1.1 (0.4, 3.0)	2.7 (1.4, 5.0)	5.3 (3.3, 8.6)
C-Stem AMT	Marathon	10	518	2	2	3	3	0.8 (0.3, 2.1)	1.5 (0.7, 3.1)	2.4 (1.3, 4.5)
C-Stem AMT	PINNACLE	159	5358	15	67	15	62	1.6 (1.3, 2.0)	2.7 (2.3, 3.2)	4.1 (3.4, 5.0)
CLS	Allofit*	71	817	9	37	16	9	2.5 (1.6, 3.8)	3.8 (2.7, 5.4)	6.1 (4.6, 8.0)
CORAIL	ASR*MoM	1312	2654	242	47	953	70	5.1 (4.3, 6.0)	27.6 (25.9, 29.4)	46.5 (44.5, 48.5)
CORAIL	DeltaMotion*	41	1209	7	15	11	8	1.5 (0.9, 2.4)	2.2 (1.5, 3.2)	3.2 (2.3, 4.4)
CORAIL	Duraloc*	117	1267	23	48	19	27	1.6 (1.0, 2.5)	2.5 (1.8, 3.6)	5.1 (4.0, 6.6)
CORAIL	PINNACLE	2504	63365	227	962	369	946	2.0 (1.9, 2.1)	3.0 (2.8, 3.1)	4.5 (4.3, 4.7)
CORAIL	PINNACLE*MoM	139	880	19	48	22	50	2.9 (1.9, 4.2)	6.2 (4.7, 8.0)	12.2 (10.1, 14.7)
CORAIL	Trident (Shell)	26	644	4	6	3	13	2.9 (1.9, 4.6)	4.0 (2.6, 6.1)	6.2 (3.8, 9.9)
CPCS	R3	283	8057	27	87	56	113	2.4 (2.1, 2.7)	3.3 (2.9, 3.8)	4.6 (4.0, 5.2)
CPCS	Reflection (Cup)	88	863	28	6	41	13	1.6 (0.9, 2.7)	2.8 (1.9, 4.2)	7.9 (6.0, 10.4)
CPCS	Reflection (Shell)	117	2868	17	51	14	35	0.9 (0.6, 1.3)	1.6 (1.2, 2.2)	3.2 (2.6, 4.0)
CPT	Allofit	70	1815	12	31	6	21	1.3 (0.9, 2.0)	3.0 (2.3, 4.0)	4.8 (3.7, 6.2)
CPT	Continuum	154	2810	10	61	19	64	3.1 (2.6, 3.9)	4.2 (3.5, 5.1)	6.1 (5.2, 7.2)
CPT	Trabecular Metal (Shell)	121	2112	11	54	18	38	2.7 (2.1, 3.5)	4.0 (3.2, 5.0)	6.4 (5.2, 7.7)
CPT	Trilogy	435	7897	48	172	46	169	2.3 (2.0, 2.7)	3.5 (3.2, 4.0)	5.5 (5.0, 6.1)
CPT	ZCA	43	868	16	10	10	7	1.2 (0.6, 2.2)	2.4 (1.6, 3.7)	4.5 (3.2, 6.3)
Charnley	Charnley Ogee*	69	630	41	9	7	12	2.1 (1.2, 3.6)	5.1 (3.6, 7.3)	9.1 (7.0, 12.0)
Charnley	Charnley*	55	563	44	7	3	1	0.9 (0.4, 2.2)	2.2 (1.3, 3.9)	6.5 (4.6, 9.1)
Charnley	Vitalock*	44	370	9	20	4	11	2.7 (1.5, 5.0)	4.4 (2.7, 7.1)	7.9 (5.5, 11.4)
Citation	Trident (Shell)*	66	1036	4	19	18	25	1.9 (1.3, 3.0)	3.3 (2.4, 4.6)	4.4 (3.3, 5.9)
Citation	Vitalock*	54	508	4	10	21	19	1.0 (0.4, 2.4)	2.0 (1.1, 3.7)	5.2 (3.5, 7.7)
E2	Austral	31	836	1	2	8	20	2.3 (1.5, 3.6)	3.2 (2.2, 4.7)	4.5 (3.2, 6.5)
EVOK	Austral	57	1306	5	13	19	20	3.2 (2.3, 4.3)	4.2 (3.2, 5.6)	5.5 (4.2, 7.2)
Elite Plus	Duraloc*	118	953	21	66	7	24	2.2 (1.5, 3.4)	5.1 (3.9, 6.8)	9.2 (7.4, 11.5)

Femoral Component	Acetabular Component	N Revised	N Total	Type of Revision							
				THR	Femoral	Acetabular	Other	2 Yrs	5 Yrs	10 Yrs	
Epoch	Trilogy*	49	990	1	9	11	28	2.7 (1.9, 4.0)	3.6 (2.6, 4.9)	4.5 (3.3, 6.0)	
Evolve	Logical G	73	2806	6	11	10	46	1.9 (1.5, 2.5)	2.8 (2.2, 3.5)	3.5 (2.7, 4.5)	
Exeter	Contemporary*	40	428	11	7	14	8	2.9 (1.7, 5.0)	4.2 (2.6, 6.6)	6.0 (4.0, 8.9)	
Exeter	Vitalock*	81	1076	16	16	29	20	2.0 (1.3, 3.0)	2.3 (1.5, 3.4)	4.6 (3.4, 6.1)	
Exeter V40	ABGII*	44	976	10	14	13	7	0.8 (0.4, 1.6)	1.8 (1.1, 2.9)	3.4 (2.4, 4.8)	
Exeter V40	Contemporary*	325	4609	89	50	151	35	2.1 (1.8, 2.6)	3.2 (2.7, 3.8)	5.5 (4.8, 6.2)	
Exeter V40	Exeter	138	1635	32	17	67	22	1.2 (0.8, 1.9)	2.9 (2.1, 3.9)	4.6 (3.6, 5.8)	
Exeter V40	Exeter Contemporary	183	2978	59	37	62	25	1.9 (1.4, 2.4)	3.0 (2.4, 3.7)	4.5 (3.8, 5.4)	
Exeter V40	Exeter X3 Rimfit	129	4614	31	37	34	27	1.7 (1.4, 2.2)	2.5 (2.1, 3.0)	3.3 (2.7, 3.9)	
Exeter V40	Mallory-Head*	50	1434	9	28	5	8	0.8 (0.4, 1.4)	1.1 (0.6, 1.8)	2.3 (1.6, 3.3)	
Exeter V40	Trabecular Metal (Shell)	21	497	2	3	2	14	2.7 (1.6, 4.5)	3.7 (2.3, 5.8)	4.6 (3.0, 7.2)	
Exeter V40	Trident (Shell)	2511	82698	345	825	306	1035	1.5 (1.5, 1.6)	2.3 (2.2, 2.4)	3.5 (3.3, 3.6)	
Exeter V40	Trident/Titanium (Shell)	167	5175	20	44	28	75	1.9 (1.6, 2.3)	2.9 (2.4, 3.4)	4.0 (3.3, 4.7)	
Exeter V40	Trilogy*	18	517	2	5	2	9	2.3 (1.3, 4.1)	2.5 (1.5, 4.3)	3.6 (2.2, 5.8)	
Exeter V40	Vitalock*	102	1795	20	28	28	26	1.4 (1.0, 2.1)	2.3 (1.7, 3.1)	3.2 (2.5, 4.2)	
F2L	SPH-Blind*	67	571	11	20	19	17	3.9 (2.6, 5.8)	6.1 (4.4, 8.4)	7.6 (5.7, 10.2)	
H-Max	Delta-TT	79	1741	6	37	12	24	2.4 (1.8, 3.3)	3.7 (2.9, 4.7)	6.0 (4.7, 7.5)	
M/L Taper	Allofit*	27	719	1	13	4	9	1.7 (1.0, 2.9)	2.1 (1.3, 3.5)	3.8 (2.5, 5.7)	
M/L Taper	Continuum*	63	1523	7	18	11	27	2.8 (2.1, 3.7)	3.7 (2.8, 4.8)	4.3 (3.3, 5.5)	
M/L Taper	Trabecular Metal (Shell)*	17	362	1	5	3	8	1.7 (0.8, 3.7)	2.0 (0.9, 4.1)	4.3 (2.6, 7.2)	
M/L Taper	Kinectiv Continuum*	104	2085	4	33	17	50	2.8 (2.2, 3.6)	3.5 (2.8, 4.4)	5.0 (4.1, 6.1)	
MS 30	Allofit*	69	1539	14	22	20	13	1.3 (0.8, 2.0)	2.1 (1.5, 3.0)	3.5 (2.6, 4.6)	
MS 30	Continuum	19	973	2	2	4	11	1.6 (0.9, 2.6)	2.0 (1.2, 3.1)	2.1 (1.4, 3.3)	
MS 30	Fitmore	32	830	1	9	9	13	1.1 (0.6, 2.1)	2.1 (1.2, 3.4)	3.1 (2.0, 4.8)	
MS 30	Low Profile Cup	28	606	12	3	11	2	0.5 (0.2, 1.5)	1.3 (0.6, 2.7)	2.8 (1.6, 4.8)	
Mallory-Head	Mallory-Head*	234	2908	19	14	86	115	2.1 (1.6, 2.7)	3.0 (2.4, 3.7)	4.6 (3.9, 5.5)	
Meridian	Vitalock*	45	354	2	3	18	22	1.4 (0.6, 3.4)	3.5 (2.0, 6.1)	6.7 (4.4, 10.0)	
Metafix	Trinity	463	21666	52	128	91	192	1.8 (1.7, 2.0)	2.4 (2.2, 2.6)	3.1 (2.7, 3.5)	
MiniHip	Trinity	42	1332	2	22	10	8	2.7 (1.9, 3.7)	3.0 (2.2, 4.1)	3.3 (2.4, 4.5)	
Natural Hip	Fitmore*	46	882	2	8	15	21	0.9 (0.5, 1.8)	2.0 (1.3, 3.2)	4.2 (3.0, 5.9)	
Novation	BSC-Cup*	25	387	1	9	6	9	4.1 (2.6, 6.7)	6.0 (4.0, 8.9)	6.7 (4.6, 9.9)	
Omnifit	Secur-Fit*	92	716	10	24	24	34	3.7 (2.5, 5.3)	6.2 (4.6, 8.2)	9.9 (7.9, 12.5)	
Omnifit	Trident (Shell)*	172	3841	15	42	32	83	2.2 (1.8, 2.7)	3.0 (2.5, 3.6)	3.9 (3.3, 4.6)	
Optimys	RM Cup	66	2955	9	25	10	22	2.0 (1.6, 2.6)	2.5 (2.0, 3.2)	2.8 (2.1, 3.7)	
Origin	Logical G	153	4481	7	43	26	77	2.9 (2.5, 3.5)	3.8 (3.2, 4.5)	6.2 (4.7, 8.1)	
Paragon	Acetabular Shell (Global)	105	4086	3	31	28	43	1.8 (1.4, 2.3)	2.3 (1.9, 2.8)	3.0 (2.5, 3.7)	
Polarstem	R3	612	22172	35	204	89	284	2.2 (2.0, 2.4)	2.9 (2.6, 3.1)	3.8 (3.5, 4.2)	
Profemur L	Procotyl L	31	2183	1	19	1	10	1.2 (0.8, 1.8)	1.7 (1.2, 2.6)	3.0 (1.7, 5.3)	
Quadra-C	Versafitcup CC	48	2409	9	11	11	17	1.5 (1.1, 2.1)	1.9 (1.4, 2.6)	3.1 (2.2, 4.4)	
Quadra-H	Mpact	271	6662	27	136	33	75	2.4 (2.1, 2.8)	3.8 (3.3, 4.3)	6.3 (5.4, 7.4)	
Quadra-H	Versafitcup CC	803	18022	85	391	161	166	2.0 (1.8, 2.2)	3.1 (2.8, 3.4)	4.9 (4.6, 5.3)	
S-Rom	Duraloc Option*	27	523	4	9	5	9	2.1 (1.2, 3.8)	3.3 (2.1, 5.2)	4.6 (3.0, 6.8)	
S-Rom	PINNACLE	162	2669	16	91	16	39	2.8 (2.3, 3.6)	4.4 (3.7, 5.3)	5.7 (4.8, 6.7)	
SL-Plus	EP-Fit Plus	126	2136	5	55	23	43	1.9 (1.4, 2.6)	3.4 (2.7, 4.2)	5.3 (4.4, 6.4)	
SL-Plus	R3	106	1710	7	29	25	45	3.2 (2.4, 4.1)	4.3 (3.4, 5.4)	6.0 (5.0, 7.3)	
Secur-Fit	Trident (Shell)	549	9916	40	243	99	167	2.4 (2.2, 2.8)	3.6 (3.2, 4.0)	4.8 (4.4, 5.3)	
Secur-Fit Plus	Trident (Shell)	92	2956	9	32	22	29	1.6 (1.2, 2.1)	2.2 (1.7, 2.8)	3.1 (2.5, 3.9)	
Secur-Fit Plus HA	Trident (Shell)*	161	3125	11	37	38	75	1.7 (1.3, 2.2)	2.4 (1.9, 3.0)	3.5 (2.9, 4.2)	
Spectron EF	BHR*MoM	79	430	17	0	52	10	2.6 (1.4, 4.6)	6.0 (4.1, 8.8)	15.9 (12.5, 20.0)	

Femoral Component	Acetabular Component	N Revised	N Total	Type of Revision							
				THR	Femoral	Acetabular	Other	2 Yrs	5 Yrs	10 Yrs	
Spectron EF	R3	105	2171	18	22	21	44	2.4 (1.9, 3.2)	3.8 (3.1, 4.8)	5.1 (4.1, 6.2)	
Spectron EF	Reflection (Cup)	128	1406	50	12	57	9	1.3 (0.8, 2.0)	2.9 (2.1, 4.0)	7.2 (5.8, 8.9)	
Spectron EF	Reflection (Shell)*	334	4646	72	113	50	99	1.5 (1.2, 1.9)	2.7 (2.3, 3.3)	5.3 (4.6, 6.1)	
Stability	Duraloc*	58	374	4	10	18	26	1.3 (0.6, 3.2)	2.2 (1.1, 4.3)	8.9 (6.3, 12.5)	
Summit	ASR*MoM	495	1041	17	7	443	28	3.0 (2.1, 4.2)	20.1 (17.7, 22.7)	44.5 (41.5, 47.7)	
Summit	PINNACLE*	204	5772	15	48	36	105	1.8 (1.5, 2.1)	2.3 (1.9, 2.7)	3.4 (2.9, 4.0)	
Summit	PINNACLE*MoM	97	730	11	7	19	60	1.7 (0.9, 2.9)	3.5 (2.4, 5.1)	8.9 (7.0, 11.3)	
Synergy	BHR*MoM	131	698	9	12	72	38	2.7 (1.8, 4.2)	4.8 (3.4, 6.7)	12.4 (10.1, 15.2)	
Synergy	R3	196	5403	6	55	48	87	2.2 (1.8, 2.6)	2.8 (2.4, 3.3)	3.5 (3.0, 4.1)	
Synergy	Reflection (Shell)*	434	7543	39	88	152	155	2.0 (1.7, 2.3)	2.6 (2.3, 3.0)	3.9 (3.5, 4.4)	
Synergy	Trident (Shell)	22	439	0	4	9	9	1.2 (0.5, 2.7)	1.9 (0.9, 3.7)	3.8 (2.3, 6.2)	
Taper Fit	Trinity	128	5570	13	40	17	58	1.8 (1.5, 2.3)	2.7 (2.3, 3.3)	4.5 (3.1, 6.3)	
Taperloc	Exceed*	72	2191	8	21	27	16	1.9 (1.4, 2.6)	2.4 (1.9, 3.2)	3.2 (2.5, 4.0)	
Taperloc	G7	160	6661	12	40	21	87	2.2 (1.8, 2.6)	2.6 (2.2, 3.1)	3.0 (2.5, 3.5)	
Taperloc	M2a*MoM	70	471	14	2	46	8	2.6 (1.5, 4.5)	6.9 (4.9, 9.6)	12.2 (9.5, 15.6)	
Taperloc	Mallory-Head*	104	1903	10	23	32	39	2.3 (1.7, 3.0)	3.0 (2.4, 3.9)	4.7 (3.8, 5.8)	
Taperloc	Recap*MoM	56	456	15	7	25	9	2.4 (1.4, 4.4)	5.6 (3.8, 8.2)	9.8 (7.3, 13.0)	
Taperloc	Regenerex*	18	530	2	4	4	8	1.9 (1.0, 3.5)	2.3 (1.3, 4.0)	3.6 (2.2, 5.7)	
Taperloc Microplasty	G7	103	6137	10	46	10	37	1.6 (1.3, 2.0)	1.9 (1.6, 2.4)	2.8 (1.7, 4.8)	
Trabecular Metal	Allofit*	21	435	2	5	4	10	3.0 (1.8, 5.1)	4.4 (2.9, 6.9)	5.0 (3.3, 7.5)	
Trabecular Metal	Continuum*	48	645	3	16	10	19	5.8 (4.2, 7.9)	6.5 (4.9, 8.8)	7.1 (5.3, 9.4)	
Tri-Fit TS	Trinity	137	5096	15	58	24	40	1.9 (1.5, 2.3)	2.5 (2.1, 3.0)	3.2 (2.6, 3.8)	
Tri-Lock	DeltaMotion*	26	755	4	6	11	5	0.9 (0.4, 1.9)	1.5 (0.8, 2.6)	2.9 (1.9, 4.4)	
Tri-Lock	PINNACLE*	32	1110	0	10	8	14	1.7 (1.1, 2.7)	2.5 (1.7, 3.6)	3.5 (2.4, 5.0)	
VerSys	Trilogy*	270	4432	20	93	50	107	3.0 (2.6, 3.6)	3.9 (3.4, 4.5)	5.2 (4.6, 5.9)	
twinSys (cless)	RM Cup	65	1592	6	18	7	34	2.7 (2.0, 3.6)	3.4 (2.6, 4.5)	4.8 (3.7, 6.3)	
<b>TOTAL</b>		<b>22182</b>	<b>481622</b>	<b>2802</b>	<b>6915</b>	<b>5408</b>	<b>7057</b>				

Note: Only prostheses with >350 procedures have been listed

\* denotes prosthesis combinations that have not had any reported use in primary total hip procedures in 2024

MoM refers to metal/metal prosthesis combinations used with head sizes >32mm

**Table CP2 Cumulative Percent Revision of Primary Total Knee Replacement Combinations with 10 Year Data  
(Primary Diagnosis OA)**

Femoral Component	Tibial Component	Type of Revision								
		N Revised	N Total	TKR	Femoral	Tibial	Other	2 Yrs	5 Yrs	10 Yrs
ACS	ACS Fixed	170	3850	47	10	21	92	2.8 (2.3, 3.3)	4.2 (3.6, 4.9)	5.4 (4.6, 6.3)
ACS	ACS Mobile	108	2246	38	9	4	57	3.0 (2.3, 3.8)	4.6 (3.8, 5.6)	5.8 (4.8, 7.1)
AGC	AGC*	350	5028	162	5	26	157	1.7 (1.4, 2.1)	3.2 (2.8, 3.8)	4.9 (4.3, 5.6)
Active Knee	Active Knee	934	11106	282	30	43	579	2.4 (2.1, 2.7)	4.6 (4.2, 5.0)	7.8 (7.2, 8.4)
Advance	Advance II*	126	1622	52	3	13	58	3.6 (2.8, 4.6)	5.0 (4.1, 6.2)	6.7 (5.5, 8.1)
Advance	Advance*	77	992	31	4	8	34	3.9 (2.8, 5.3)	6.0 (4.7, 7.7)	8.2 (6.5, 10.2)
Apex Knee CR	Apex Knee	270	14421	60	24	13	173	1.3 (1.1, 1.5)	2.2 (1.9, 2.5)	3.1 (2.6, 3.7)
Apex Knee PS	Apex Knee	220	7507	87	8	17	108	1.7 (1.4, 2.0)	3.1 (2.7, 3.6)	4.9 (4.1, 5.7)
Attune CR	Attune	816	37247	207	41	54	514	1.6 (1.4, 1.7)	2.6 (2.5, 2.8)	3.5 (3.2, 3.8)
Attune PS	Attune	419	17537	131	24	53	211	1.6 (1.4, 1.8)	2.7 (2.4, 2.9)	4.7 (4.1, 5.5)
BalanSys	BalanSys	155	5003	53	8	9	85	1.5 (1.2, 1.9)	2.5 (2.1, 3.0)	3.9 (3.3, 4.7)
Buechel-Pappas	Buechel-Pappas*	58	467	21	2	2	33	4.3 (2.8, 6.6)	8.1 (5.9, 11.0)	10.7 (8.2, 14.0)
Columbus	Columbus	276	8402	72	12	15	177	1.9 (1.7, 2.3)	3.8 (3.3, 4.3)	6.1 (5.2, 7.2)
Duracon	Duracon*	1391	19830	400	33	68	890	2.1 (1.9, 2.3)	3.5 (3.2, 3.7)	5.2 (4.9, 5.5)
E.Motion	E.Motion	77	1034	23	9	4	41	4.3 (3.2, 5.8)	6.5 (5.2, 8.3)	8.5 (6.8, 10.6)
Evolution	Evolution	375	13525	92	2	15	266	1.6 (1.4, 1.9)	2.9 (2.6, 3.2)	4.2 (3.7, 4.7)
GMK Primary	GMK Primary	149	3967	43	5	16	85	2.5 (2.0, 3.0)	3.8 (3.2, 4.5)	5.1 (4.3, 6.0)
GMK Sphere Primary	GMK Primary	653	26250	150	17	40	446	2.1 (1.9, 2.3)	3.2 (2.9, 3.5)	4.4 (3.9, 5.0)
GMK Sphere Primary	GMK Sphere Primary	111	4011	29	2	9	71	2.1 (1.7, 2.7)	3.6 (3.0, 4.4)	4.9 (3.9, 6.2)
Genesis II CR	Genesis II	1313	26672	283	79	57	894	2.0 (1.8, 2.1)	3.4 (3.2, 3.7)	5.0 (4.7, 5.3)
Genesis II CR	Profix Mobile*	144	1209	60	9	8	67	2.7 (1.9, 3.8)	5.4 (4.2, 6.8)	8.8 (7.3, 10.6)
Genesis II Oxinium CR (ctd)	Genesis II	686	11473	140	37	28	481	1.9 (1.7, 2.2)	3.5 (3.1, 3.9)	5.9 (5.5, 6.5)
Genesis II Oxinium PS (ctd)	Genesis II	1581	22705	243	37	179	1122	2.7 (2.5, 3.0)	4.9 (4.6, 5.2)	7.0 (6.7, 7.4)
Genesis II PS	Genesis II	1013	21014	185	33	62	733	2.0 (1.8, 2.2)	3.6 (3.3, 3.8)	4.9 (4.6, 5.3)
Journey II Oxinium	Journey	34	3900	3	2	1	28	1.1 (0.7, 1.6)	4.5 (2.4, 8.2)	4.5 (2.4, 8.2)
Journey Oxinium	Journey*	430	2975	65	7	33	325	3.4 (2.8, 4.1)	6.5 (5.7, 7.5)	11.3 (10.2, 12.6)
Kinemax Plus	Kinemax Plus*	140	1815	83	4	5	48	1.8 (1.3, 2.6)	3.2 (2.4, 4.1)	4.6 (3.7, 5.7)
LCS CR	LCS	638	8346	262	24	90	262	2.5 (2.1, 2.8)	4.5 (4.0, 4.9)	6.4 (5.9, 7.0)
LCS CR	MBT Duofix*	934	15248	278	38	44	574	2.7 (2.4, 2.9)	4.1 (3.8, 4.4)	5.3 (5.0, 5.7)
LCS CR	MBT*	1626	33003	596	73	162	795	1.9 (1.8, 2.1)	3.5 (3.3, 3.7)	4.9 (4.6, 5.1)
LCS Duofix	MBT Duofix*	546	3606	375	27	8	136	3.7 (3.2, 4.4)	10.2 (9.2, 11.2)	13.3 (12.3, 14.5)
LCS Duofix	MBT*	149	1169	101	9	2	37	3.3 (2.4, 4.5)	8.1 (6.7, 9.9)	11.9 (10.1, 13.9)
LCS PS	MBT*	47	482	12	5	1	29	4.6 (3.1, 6.9)	6.6 (4.7, 9.2)	10.4 (7.9, 13.6)
Legion CR	Genesis II	370	10342	72	27	15	256	2.1 (1.8, 2.4)	3.8 (3.4, 4.2)	5.4 (4.7, 6.1)
Legion Oxinium CR	Genesis II	365	12774	86	28	12	239	1.7 (1.5, 2.0)	3.1 (2.8, 3.5)	4.3 (3.8, 4.9)
Legion Oxinium FS	Legion	33	360	2	2	0	29	6.7 (4.5, 10.0)	8.9 (6.2, 12.8)	11.9 (8.2, 16.9)
Legion Oxinium PS	Genesis II	822	19458	126	23	69	604	2.1 (1.9, 2.3)	3.8 (3.5, 4.1)	5.2 (4.8, 5.5)
Legion PS	Genesis II	234	6435	60	5	11	158	2.0 (1.7, 2.4)	3.1 (2.7, 3.6)	4.2 (3.7, 4.8)
MBK (Zimmer)	Nexgen*	41	448	23	1	2	15	2.3 (1.2, 4.1)	4.1 (2.6, 6.5)	6.2 (4.2, 8.9)
MRK	MRK	35	855	9	1	0	25	1.9 (1.2, 3.1)	3.1 (2.1, 4.5)	4.6 (3.2, 6.6)
Maxim	Maxim*	164	1819	56	11	6	91	2.1 (1.5, 2.8)	3.3 (2.6, 4.3)	5.2 (4.3, 6.4)
Maxim	Vanguard*	101	628	47	6	6	42	3.1 (2.0, 4.8)	5.6 (4.0, 7.7)	8.3 (6.3, 10.9)
Natural Knee Flex	Natural Knee II*	192	6272	51	8	9	124	1.5 (1.2, 1.8)	2.3 (2.0, 2.7)	3.2 (2.7, 3.7)
Natural Knee II	Natural Knee II*	476	6443	227	10	60	179	1.6 (1.4, 2.0)	2.8 (2.4, 3.2)	4.9 (4.4, 5.5)
Nexgen CR	Nexgen TM CR*	61	867	22	5	11	23	2.4 (1.6, 3.7)	5.3 (4.0, 7.1)	6.4 (4.9, 8.3)

Femoral Component	Tibial Component	Type of Revision									
		N Revised	N Total	TKR	Femoral	Tibial	Other	2 Yrs	5 Yrs	10 Yrs	
Nexgen CR	Nexgen*	467	11582	155	23	33	256	1.2 (1.1, 1.5)	2.2 (1.9, 2.5)	3.1 (2.8, 3.5)	
Nexgen CR Flex	Nexgen TM CR*	398	12311	147	23	31	197	1.2 (1.0, 1.4)	2.2 (1.9, 2.5)	3.1 (2.7, 3.4)	
Nexgen CR Flex	Nexgen*	1821	60434	481	119	139	1082	1.4 (1.3, 1.5)	2.3 (2.2, 2.4)	3.1 (3.0, 3.3)	
Nexgen LCCK	Nexgen	57	987	10	3	1	43	3.0 (2.1, 4.3)	4.5 (3.4, 6.1)	5.9 (4.4, 7.8)	
Nexgen LPS	Nexgen TM LPS*	43	1476	15	4	7	17	1.0 (0.6, 1.6)	2.1 (1.5, 3.0)	2.6 (1.9, 3.7)	
Nexgen LPS	Nexgen*	395	7024	108	22	34	231	1.9 (1.6, 2.3)	3.3 (2.9, 3.7)	4.8 (4.3, 5.3)	
Nexgen LPS Flex	Nexgen	1853	37836	554	74	262	963	1.8 (1.6, 1.9)	3.1 (3.0, 3.3)	4.8 (4.6, 5.0)	
Nexgen LPS Flex	Nexgen TM LPS*	81	1576	39	5	7	30	2.0 (1.4, 2.8)	3.4 (2.6, 4.5)	4.4 (3.5, 5.6)	
Nexgen RH	Nexgen	44	832	4	5	4	31	2.9 (1.9, 4.4)	5.2 (3.7, 7.3)	8.8 (6.4, 12.1)	
Optetrak-CR	Optetrak*	63	504	28	3	4	28	3.2 (2.0, 5.2)	6.1 (4.3, 8.7)	10.2 (7.7, 13.3)	
Optetrak-PS	Optetrak RBK*	108	1112	39	3	3	63	2.8 (2.0, 4.0)	5.9 (4.7, 7.5)	8.6 (7.1, 10.5)	
Optetrak-PS	Optetrak*	380	2365	195	10	31	144	3.4 (2.8, 4.2)	6.4 (5.4, 7.4)	12.2 (10.9, 13.7)	
PFC Sigma CR	MBT Duofix*	177	3314	32	18	6	121	2.4 (1.9, 3.0)	3.4 (2.9, 4.1)	4.5 (3.8, 5.3)	
PFC Sigma CR	MBT*	362	6273	84	35	46	197	2.6 (2.3, 3.1)	3.9 (3.4, 4.4)	5.0 (4.5, 5.6)	
PFC Sigma CR	PFC Sigma*	982	24917	259	59	71	593	1.5 (1.4, 1.7)	2.5 (2.3, 2.7)	3.5 (3.3, 3.8)	
PFC Sigma PS	MBT Duofix*	187	2212	45	4	6	132	3.5 (2.8, 4.3)	5.9 (5.0, 6.9)	7.8 (6.7, 9.0)	
PFC Sigma PS	MBT*	407	6334	150	17	25	215	2.2 (1.9, 2.6)	4.0 (3.5, 4.5)	5.4 (4.8, 6.0)	
PFC Sigma PS	PFC Sigma*	413	8041	149	14	28	222	2.0 (1.7, 2.3)	3.3 (2.9, 3.7)	4.7 (4.3, 5.3)	
Persona CR	Persona	1195	76213	227	56	111	801	1.5 (1.4, 1.6)	2.4 (2.3, 2.6)	2.8 (2.5, 3.1)	
Persona PS	Persona	154	6546	30	10	4	110	1.8 (1.5, 2.2)	2.8 (2.4, 3.3)	3.4 (2.8, 4.0)	
Profix	Profix Mobile*	114	986	43	6	5	60	5.1 (3.9, 6.7)	8.2 (6.6, 10.1)	9.9 (8.1, 12.0)	
Profix	Profix*	323	5370	82	13	18	210	2.3 (1.9, 2.8)	3.8 (3.3, 4.3)	5.4 (4.8, 6.1)	
Profix Oxinium (ctd)	Profix*	119	1049	29	5	14	71	4.1 (3.1, 5.6)	7.0 (5.6, 8.7)	8.9 (7.3, 10.8)	
RBK	RBK*	638	11019	259	21	44	314	2.3 (2.1, 2.6)	3.9 (3.6, 4.3)	5.4 (5.0, 5.8)	
Rocc	Rocc*	46	575	18	1	2	25	3.3 (2.1, 5.2)	5.2 (3.6, 7.3)	6.8 (5.0, 9.3)	
Rotaglide Plus	Rotaglide Plus*	87	616	43	1	5	38	3.3 (2.2, 5.1)	5.8 (4.1, 8.0)	11.2 (8.8, 14.2)	
SAIPH	SAIPH	120	6711	30	4	0	86	1.1 (0.9, 1.4)	2.1 (1.7, 2.5)	2.8 (2.1, 3.6)	
Score	Score	454	6400	188	23	12	231	3.0 (2.6, 3.5)	5.6 (5.1, 6.3)	9.0 (8.1, 9.9)	
Scorpio CR	Scorpio+*	221	2448	56	10	34	121	2.1 (1.6, 2.7)	4.3 (3.6, 5.2)	7.1 (6.2, 8.3)	
Scorpio CR	Series 7000*	696	11561	183	28	48	437	1.8 (1.6, 2.1)	3.3 (3.0, 3.6)	5.1 (4.7, 5.5)	
Scorpio NRG CR	Series 7000*	248	5070	72	15	13	148	2.1 (1.7, 2.5)	3.2 (2.7, 3.7)	4.6 (4.0, 5.2)	
Scorpio NRG PS	Series 7000*	209	3931	46	9	20	134	2.0 (1.6, 2.5)	3.7 (3.1, 4.3)	4.5 (3.9, 5.3)	
Scorpio PS	Scorpio*	37	524	11	0	11	15	2.1 (1.2, 3.8)	4.5 (3.0, 6.7)	6.1 (4.3, 8.6)	
Scorpio PS	Scorpio+*	169	2036	52	14	10	93	2.7 (2.1, 3.5)	5.1 (4.2, 6.1)	6.7 (5.7, 8.0)	
Scorpio PS	Series 7000*	382	4696	136	10	70	166	2.6 (2.2, 3.1)	4.7 (4.1, 5.3)	6.9 (6.1, 7.7)	
Trekking	Trekking	75	1287	34	7	3	31	3.1 (2.3, 4.3)	4.8 (3.7, 6.1)	6.1 (4.9, 7.7)	
Triathlon CR	Triathlon	4360	187428	819	173	214	3154	1.4 (1.4, 1.5)	2.3 (2.3, 2.4)	3.5 (3.4, 3.6)	
Triathlon FS	Triathlon	27	494	7	2	1	17	4.2 (2.7, 6.6)	6.4 (4.4, 9.3)	6.4 (4.4, 9.3)	
Triathlon PS	Triathlon	704	15654	138	38	86	442	2.2 (2.0, 2.5)	3.7 (3.4, 4.0)	5.2 (4.8, 5.6)	
Vanguard CR	Regenerex*	110	1708	30	5	10	65	2.6 (2.0, 3.5)	4.0 (3.2, 5.1)	6.1 (5.0, 7.4)	
Vanguard CR	Vanguard	1224	27180	311	45	72	796	1.7 (1.5, 1.9)	2.9 (2.7, 3.1)	4.6 (4.4, 4.9)	
Vanguard PS	Regenerex*	45	462	21	3	4	17	5.0 (3.3, 7.4)	7.8 (5.7, 10.7)	9.7 (7.2, 13.0)	
Vanguard PS	Vanguard*	378	5273	108	7	61	202	3.3 (2.9, 3.9)	5.2 (4.6, 5.8)	7.3 (6.5, 8.0)	
<b>TOTAL</b>		<b>39283</b>	<b>978730</b>	<b>10914</b>	<b>1706</b>	<b>2921</b>	<b>23742</b>				

Note: Only prostheses with >350 procedures have been listed

\* Denotes prosthesis combinations that have not had any reported use in primary total knee procedures in 2024

**Table CP3 Cumulative Percent Revision of Primary Total Stemmed Anatomic Shoulder Replacement Combinations with 10 Year Data (Primary Diagnosis OA)**

Humeral Component	Glenoid Component	Type of Revision								
		N Revised	N Total	TSR	Humeral	Glenoid	Other	2 Yrs	5 Yrs	10 Yrs
Aequalis	Aequalis*	108	1563	65	7	9	27	2.3 (1.6, 3.1)	3.4 (2.6, 4.4)	5.9 (4.8, 7.3)
Aequalis	Perform*	7	125	3	1	1	2	4.0 (1.7, 9.4)	5.7 (2.7, 11.5)	5.7 (2.7, 11.5)
Affinis	Affinis	21	198	7	1	7	6	1.1 (0.3, 4.3)	5.0 (2.7, 9.5)	8.9 (5.4, 14.3)
Ascend	Aequalis*	18	236	14	1	1	2	3.0 (1.4, 6.2)	5.6 (3.3, 9.5)	9.0 (5.5, 14.7)
Ascend	Perform*	7	107	5	0	0	2	1.9 (0.5, 7.4)	3.9 (1.5, 10.0)	3.9 (1.5, 10.0)
Ascend Flex	Perform	41	1388	38	1	0	2	1.7 (1.1, 2.5)	2.8 (2.0, 4.0)	4.9 (3.4, 7.1)
Bigliani/Flatow	Bigliani/Flatow*	15	142	8	3	2	2	2.1 (0.7, 6.4)	3.6 (1.5, 8.3)	8.9 (5.0, 15.6)
Bigliani/Flatow TM	Bigliani/Flatow TM*	47	643	23	3	3	18	3.8 (2.5, 5.6)	5.0 (3.6, 7.1)	7.1 (5.3, 9.5)
Bigliani/Flatow TM	Bigliani/Flatow*	39	453	26	1	4	8	3.6 (2.2, 5.7)	5.4 (3.6, 7.9)	8.4 (6.1, 11.7)
Comprehensive	Comprehensive	56	931	41	4	1	10	4.8 (3.6, 6.4)	5.8 (4.4, 7.6)	7.6 (5.7, 10.1)
Equinoxe	Equinoxe	80	726	55	6	4	15	5.1 (3.7, 7.0)	9.6 (7.4, 12.3)	24.2 (18.1, 32.0)
Global AP	Global*	159	2969	92	16	9	42	2.3 (1.9, 3.0)	3.3 (2.7, 4.1)	5.3 (4.5, 6.2)
Global Advantage	Global*	56	725	27	6	10	13	2.4 (1.5, 3.8)	3.8 (2.6, 5.5)	6.7 (5.0, 9.0)
SMR	SMR	36	534	29	1	1	5	4.5 (3.0, 6.7)	5.6 (3.9, 8.0)	6.9 (5.0, 9.7)
SMR	SMR L1*	442	2280	11	412	1	18	8.9 (7.8, 10.1)	13.3 (11.9, 14.7)	20.3 (18.5, 22.2)
SMR	SMR L2*	308	798	6	256	7	39	17.5 (15.0, 20.3)	30.3 (27.2, 33.7)	39.1 (35.7, 42.7)
<b>TOTAL</b>		<b>1440</b>	<b>13818</b>	<b>450</b>	<b>719</b>	<b>60</b>	<b>211</b>			

Note: Only prostheses with >50 procedures have been listed

\* Denotes prosthesis combinations that have not had any reported use in primary total stemmed anatomic shoulder procedures in 2024

**Table CP4 Cumulative Percent Revision of Primary Total Stemmed Reverse Shoulder Replacement Combinations with 10 Year Data (All Diagnoses)**

Humeral Component	Glenoid Component	Type of Revision								
		N Revised	N Total	TSR	Humeral	Glenoid	Other	2 Yrs	5 Yrs	10 Yrs
Aequalis	Aequalis	219	4556	13	38	17	151	2.9 (2.4, 3.4)	4.4 (3.8, 5.1)	6.7 (5.8, 7.7)
Ascend Flex	Aequalis	157	4084	33	94	2	28	3.4 (2.9, 4.1)	4.9 (4.2, 5.8)	5.7 (4.6, 7.2)
Comprehensive	Comprehensive Reverse	159	8753	62	66	4	27	1.8 (1.5, 2.1)	2.5 (2.1, 3.0)	3.4 (2.2, 5.2)
Delta CTA	Delta CTA*	11	89	1	0	3	7	5.7 (2.4, 13.1)	6.9 (3.1, 14.6)	10.0 (5.1, 19.1)
Delta Xtend	Delta Xtend	490	12335	28	72	29	361	2.8 (2.5, 3.1)	3.7 (3.4, 4.1)	5.0 (4.5, 5.5)
RSP	RSP	115	2329	9	27	8	71	3.6 (2.9, 4.5)	5.2 (4.3, 6.3)	5.8 (4.7, 7.1)
SMR	SMR L1	505	11877	36	111	40	318	3.6 (3.3, 4.0)	4.3 (3.9, 4.7)	5.3 (4.8, 5.8)
SMR	SMR L2*	75	1141	2	17	2	54	4.3 (3.2, 5.6)	5.5 (4.3, 7.1)	7.2 (5.7, 8.9)
Trabecular Metal	Trabecular Metal	105	1989	2	8	35	60	3.5 (2.8, 4.5)	5.1 (4.2, 6.3)	6.4 (5.2, 7.9)
<b>TOTAL</b>		<b>1836</b>	<b>47153</b>	<b>186</b>	<b>433</b>	<b>140</b>	<b>1077</b>			

Note: Only prostheses with >50 procedures have been listed

\* Denotes prosthesis combinations that have not had any reported use in primary total stemmed reverse shoulder procedures in 2024

## Fifteen Year Outcomes

### HIP REPLACEMENT

There are 84 hip prosthesis combinations listed that have been used in >350 procedures and have data to at least 15 years. The listed prosthesis combinations were used in 60% of all primary total conventional hip replacement procedures performed for osteoarthritis. The 15 year cumulative percent revision ranges from 3.9% to 53.6% (Table CP5).

### KNEE REPLACEMENT

There are 67 knee prosthesis combinations that have been used in >350 procedures and have data to at least 15 years. The listed prosthesis combinations were used in 75.3% of all primary total knee replacement procedures performed for osteoarthritis. The 15 year cumulative percent revision ranges from 3.5% to 18.7% (Table CP6).

**Table CP5 Cumulative Percent Revision of Primary Total Conventional Hip Replacement Combinations with 15 Year Data (Primary Diagnosis OA)**

Femoral Component	Acetabular Component	Type of Revision								
		N Revised	N Total	THR	Femoral	Acetabular	Other	5 Yrs	10 Yrs	15 Yrs
ABGII	ABGII (Shell/Insert)*	105	853	21	56	19	9	2.7 (1.8, 4.1)	6.6 (5.1, 8.6)	10.6 (8.6, 13.1)
ABGII	ABGII*	379	2772	65	183	90	41	4.1 (3.4, 5.0)	6.8 (5.9, 7.9)	11.9 (10.7, 13.3)
ABGII	Trident (Shell)*	302	2439	17	188	39	58	4.9 (4.1, 5.9)	8.5 (7.4, 9.7)	13.2 (11.8, 14.9)
Accolade I	Mitch TRH*MoM	108	357	51	22	25	10	10.3 (7.5, 14.0)	18.9 (15.1, 23.5)	31.5 (26.6, 37.0)
Accolade I	Trident (Shell)*	610	8574	71	252	113	174	3.8 (3.4, 4.2)	5.7 (5.2, 6.2)	7.5 (6.9, 8.2)
Adapter	Bionik*MoM	99	376	21	11	23	44	15.0 (11.7, 19.2)	25.0 (20.8, 30.0)	29.9 (25.2, 35.3)
Alloclassic	Allofit*	351	5170	42	153	61	95	2.9 (2.5, 3.4)	5.0 (4.4, 5.7)	7.7 (6.9, 8.6)
Alloclassic	Durom*MoM	109	547	30	16	48	15	7.4 (5.5, 10.0)	16.3 (13.4, 19.9)	21.5 (18.0, 25.5)
Alloclassic	Fitmore*	150	1709	16	74	20	40	5.6 (4.6, 6.8)	7.5 (6.3, 8.9)	9.6 (8.2, 11.4)
Alloclassic	Metasul*	26	371	6	2	12	6	3.6 (2.1, 6.1)	5.1 (3.3, 8.1)	6.6 (4.4, 9.8)
Alloclassic	Trabecular Metal (Shell)*	55	957	5	18	6	26	4.0 (2.9, 5.5)	5.1 (3.9, 6.8)	6.9 (5.2, 9.0)
Anthology	R3	285	8390	27	83	58	117	2.9 (2.5, 3.3)	3.7 (3.3, 4.2)	4.3 (3.8, 5.0)
Anthology	Reflection (Shell)*	42	909	4	16	14	8	3.0 (2.1, 4.4)	4.5 (3.3, 6.2)	4.9 (3.6, 6.6)
Apex	Fin II*	66	924	10	14	23	19	3.4 (2.4, 4.8)	6.0 (4.6, 7.9)	8.8 (6.8, 11.2)
C-Stem	Duraloc*	97	894	13	26	14	44	3.8 (2.7, 5.3)	6.9 (5.3, 8.9)	11.9 (9.6, 14.7)
C-Stem	Elite Plus LPW*	25	367	11	5	9	0	2.7 (1.4, 5.0)	5.3 (3.3, 8.6)	8.5 (5.6, 12.8)
C-Stem AMT	PINNACLE	159	5358	15	67	15	62	2.7 (2.3, 3.2)	4.1 (3.4, 5.0)	6.6 (4.5, 9.6)
CLS	Allofit*	71	817	9	37	16	9	3.8 (2.7, 5.4)	6.1 (4.6, 8.0)	8.8 (6.9, 11.3)
CORAIL	ASR*MoM	1312	2654	242	47	953	70	27.6 (25.9, 29.4)	46.5 (44.5, 48.5)	53.6 (51.6, 55.7)
CORAIL	Duraloc*	117	1267	23	48	19	27	2.5 (1.8, 3.6)	5.1 (4.0, 6.6)	9.6 (7.8, 11.7)
CORAIL	PINNACLE	2504	63365	227	962	369	946	3.0 (2.8, 3.1)	4.5 (4.3, 4.7)	7.0 (6.6, 7.4)
CORAIL	PINNACLE*MoM	139	880	19	48	22	50	6.2 (4.7, 8.0)	12.2 (10.1, 14.7)	17.5 (14.9, 20.4)
CPCS	R3	283	8057	27	87	56	113	3.3 (2.9, 3.8)	4.6 (4.0, 5.2)	5.3 (4.6, 6.2)
CPCS	Reflection (Cup)	88	863	28	6	41	13	2.8 (1.9, 4.2)	7.9 (6.0, 10.4)	17.3 (13.8, 21.6)
CPCS	Reflection (Shell)	117	2868	17	51	14	35	1.6 (1.2, 2.2)	3.2 (2.6, 4.0)	5.4 (4.4, 6.6)
CPT	Allofit	70	1815	12	31	6	21	3.0 (2.3, 4.0)	4.8 (3.7, 6.2)	7.0 (5.1, 9.5)
CPT	Trabecular Metal (Shell)	121	2112	11	54	18	38	4.0 (3.2, 5.0)	6.4 (5.2, 7.7)	8.9 (7.1, 11.0)
CPT	Trilogy	435	7897	48	172	46	169	3.5 (3.2, 4.0)	5.5 (5.0, 6.1)	7.0 (6.3, 7.7)
CPT	ZCA	43	868	16	10	10	7	2.4 (1.6, 3.7)	4.5 (3.2, 6.3)	6.1 (4.3, 8.5)
Charnley	Charnley Ogee*	69	630	41	9	7	12	5.1 (3.6, 7.3)	9.1 (7.0, 12.0)	13.7 (10.7, 17.4)
Charnley	Charnley*	55	563	44	7	3	1	2.2 (1.3, 3.9)	6.5 (4.6, 9.1)	10.4 (7.8, 13.8)
Charnley	Vitalock*	44	370	9	20	4	11	4.4 (2.7, 7.1)	7.9 (5.5, 11.4)	11.5 (8.4, 15.7)
Citation	Trident (Shell)*	66	1036	4	19	18	25	3.3 (2.4, 4.6)	4.4 (3.3, 5.9)	6.0 (4.6, 7.7)

Femoral Component	Acetabular Component	Type of Revision								
		N Revised	N Total	THR	Femoral	Acetabular	Other	5 Yrs	10 Yrs	15 Yrs
Citation	Vitalock*	54	508	4	10	21	19	2.0 (1.1, 3.7)	5.2 (3.5, 7.7)	9.1 (6.7, 12.4)
Elite Plus	Duraloc*	118	953	21	66	7	24	5.1 (3.9, 6.8)	9.2 (7.4, 11.5)	14.9 (12.3, 18.0)
Epoch	Trilogy*	49	990	1	9	11	28	3.6 (2.6, 4.9)	4.5 (3.3, 6.0)	5.1 (3.9, 6.8)
Exeter	Contemporary*	40	428	11	7	14	8	4.2 (2.6, 6.6)	6.0 (4.0, 8.9)	12.6 (9.1, 17.5)
Exeter	Vitalock*	81	1076	16	16	29	20	2.3 (1.5, 3.4)	4.6 (3.4, 6.1)	6.8 (5.3, 8.8)
Exeter V40	ABGII*	44	976	10	14	13	7	1.8 (1.1, 2.9)	3.4 (2.4, 4.8)	4.4 (3.2, 6.1)
Exeter V40	Contemporary*	325	4609	89	50	151	35	3.2 (2.7, 3.8)	5.5 (4.8, 6.2)	8.7 (7.7, 9.9)
Exeter V40	Exeter	138	1635	32	17	67	22	2.9 (2.1, 3.9)	4.6 (3.6, 5.8)	9.7 (8.0, 11.6)
Exeter V40	Exeter Contemporary	183	2978	59	37	62	25	3.0 (2.4, 3.7)	4.5 (3.8, 5.4)	7.7 (6.6, 9.1)
Exeter V40	Mallory-Head*	50	1434	9	28	5	8	1.1 (0.6, 1.8)	2.3 (1.6, 3.3)	4.0 (2.9, 5.4)
Exeter V40	Trabecular Metal (Shell)	21	497	2	3	2	14	3.7 (2.3, 5.8)	4.6 (3.0, 7.2)	5.1 (3.3, 7.8)
Exeter V40	Trident (Shell)	2511	82698	345	825	306	1035	2.3 (2.2, 2.4)	3.5 (3.3, 3.6)	4.9 (4.7, 5.2)
Exeter V40	Trilogy*	18	517	2	5	2	9	2.5 (1.5, 4.3)	3.6 (2.2, 5.8)	3.9 (2.5, 6.2)
Exeter V40	Vitalock*	102	1795	20	28	28	26	2.3 (1.7, 3.1)	3.2 (2.5, 4.2)	5.0 (4.0, 6.3)
F2L	SPH-Blind*	67	571	11	20	19	17	6.1 (4.4, 8.4)	7.6 (5.7, 10.2)	11.5 (9.0, 14.7)
M/L Taper	Allofit*	27	719	1	13	4	9	2.1 (1.3, 3.5)	3.8 (2.5, 5.7)	5.6 (3.7, 8.6)
M/L Taper	Trabecular Metal (Shell)*	17	362	1	5	3	8	2.0 (0.9, 4.1)	4.3 (2.6, 7.2)	5.7 (3.5, 9.1)
MS 30	Allofit*	69	1539	14	22	20	13	2.1 (1.5, 3.0)	3.5 (2.6, 4.6)	5.8 (4.4, 7.5)
MS 30	Fitmore	32	830	1	9	9	13	2.1 (1.2, 3.4)	3.1 (2.0, 4.8)	6.6 (4.4, 9.7)
MS 30	Low Profile Cup	28	606	12	3	11	2	1.3 (0.6, 2.7)	2.8 (1.6, 4.8)	5.0 (3.0, 8.2)
Mallory-Head	Mallory-Head*	234	2908	19	14	86	115	3.0 (2.4, 3.7)	4.6 (3.9, 5.5)	8.0 (6.9, 9.2)
Meridian	Vitalock*	45	354	2	3	18	22	3.5 (2.0, 6.1)	6.7 (4.4, 10.0)	11.4 (8.3, 15.5)
Natural Hip	Fitmore*	46	882	2	8	15	21	2.0 (1.3, 3.2)	4.2 (3.0, 5.9)	4.9 (3.5, 6.7)
Omnifit	Secur-Fit*	92	716	10	24	24	34	6.2 (4.6, 8.2)	9.9 (7.9, 12.5)	13.4 (10.8, 16.4)
Omnifit	Trident (Shell)*	172	3841	15	42	32	83	3.0 (2.5, 3.6)	3.9 (3.3, 4.6)	4.9 (4.2, 5.8)
Polarstem	R3	612	22172	35	204	89	284	2.9 (2.6, 3.1)	3.8 (3.5, 4.2)	4.6 (3.9, 5.5)
Quadra-H	Versafitcup CC	803	18022	85	391	161	166	3.1 (2.8, 3.4)	4.9 (4.6, 5.3)	7.3 (6.4, 8.3)
S-Rom	Duraloc Option*	27	523	4	9	5	9	3.3 (2.1, 5.2)	4.6 (3.0, 6.8)	5.0 (3.4, 7.3)
S-Rom	PINNACLE	162	2669	16	91	16	39	4.4 (3.7, 5.3)	5.7 (4.8, 6.7)	6.8 (5.8, 8.0)
SL-Plus	EP-Fit Plus	126	2136	5	55	23	43	3.4 (2.7, 4.2)	5.3 (4.4, 6.4)	6.4 (5.4, 7.6)
SL-Plus	R3	106	1710	7	29	25	45	4.3 (3.4, 5.4)	6.0 (5.0, 7.3)	7.7 (6.3, 9.4)
Secur-Fit	Trident (Shell)	549	9916	40	243	99	167	3.6 (3.2, 4.0)	4.8 (4.4, 5.3)	6.5 (5.9, 7.1)
Secur-Fit Plus	Trident (Shell)	92	2956	9	32	22	29	2.2 (1.7, 2.8)	3.1 (2.5, 3.9)	4.1 (3.3, 5.1)
Secur-Fit Plus HA	Trident (Shell)*	161	3125	11	37	38	75	2.4 (1.9, 3.0)	3.5 (2.9, 4.2)	4.6 (3.9, 5.5)
Spectron EF	BHR*MoM	79	430	17	0	52	10	6.0 (4.1, 8.8)	15.9 (12.5, 20.0)	21.5 (17.5, 26.3)
Spectron EF	R3	105	2171	18	22	21	44	3.8 (3.1, 4.8)	5.1 (4.1, 6.2)	6.9 (5.5, 8.7)
Spectron EF	Reflection (Cup)	128	1406	50	12	57	9	2.9 (2.1, 4.0)	7.2 (5.8, 8.9)	12.9 (10.8, 15.5)
Spectron EF	Reflection (Shell)*	334	4646	72	113	50	99	2.7 (2.3, 3.3)	5.3 (4.6, 6.1)	8.7 (7.7, 9.7)
Stability	Duraloc*	58	374	4	10	18	26	2.2 (1.1, 4.3)	8.9 (6.3, 12.5)	15.9 (12.1, 20.6)
Summit	ASR*MoM	495	1041	17	7	443	28	20.1 (17.7, 22.7)	44.5 (41.5, 47.7)	50.4 (47.3, 53.7)
Summit	PINNACLE*	204	5772	15	48	36	105	2.3 (1.9, 2.7)	3.4 (2.9, 4.0)	4.8 (4.1, 5.7)
Summit	PINNACLE*MoM	97	730	11	7	19	60	3.5 (2.4, 5.1)	8.9 (7.0, 11.3)	11.9 (9.6, 14.7)
Synergy	BHR*MoM	131	698	9	12	72	38	4.8 (3.4, 6.7)	12.4 (10.1, 15.2)	17.8 (15.0, 21.1)
Synergy	R3	196	5403	6	55	48	87	2.8 (2.4, 3.3)	3.5 (3.0, 4.1)	5.0 (4.2, 5.8)
Synergy	Reflection (Shell)*	434	7543	39	88	152	155	2.6 (2.3, 3.0)	3.9 (3.5, 4.4)	5.6 (5.0, 6.2)
Synergy	Trident (Shell)	22	439	0	4	9	9	1.9 (0.9, 3.7)	3.8 (2.3, 6.2)	6.1 (4.0, 9.5)
Taperloc	Exceed*	72	2191	8	21	27	16	2.4 (1.9, 3.2)	3.2 (2.5, 4.0)	3.9 (3.0, 5.0)
Taperloc	M2a*MoM	70	471	14	2	46	8	6.9 (4.9, 9.6)	12.2 (9.5, 15.6)	15.0 (12.0, 18.8)

Femoral Component	Acetabular Component	Type of Revision								
		N Revised	N Total	THR	Femoral	Acetabular	Other	5 Yrs	10 Yrs	15 Yrs
Taperloc	Mallory-Head*	104	1903	10	23	32	39	3.0 (2.4, 3.9)	4.7 (3.8, 5.8)	6.6 (5.3, 8.3)
Taperloc	Recap <sup>*MoM</sup>	56	456	15	7	25	9	5.6 (3.8, 8.2)	9.8 (7.3, 13.0)	12.3 (9.5, 15.9)
VerSys	Trilogy*	270	4432	20	93	50	107	3.9 (3.4, 4.5)	5.2 (4.6, 5.9)	6.1 (5.4, 6.9)
<b>TOTAL</b>		<b>18558</b>	<b>354786</b>	<b>2448</b>	<b>5687</b>	<b>4785</b>	<b>5638</b>			

Note: Only prostheses with >350 procedures have been listed

\* denotes prosthesis combinations with no reported use in primary total conventional hip procedures in 2024

MoM refers to metal/metal prosthesis combinations used with head sizes >32mm

**Table CP6 Cumulative Percent Revision of Primary Total Knee Replacement Combinations with 15 Year Data (Primary Diagnosis OA)**

Femoral Component	Tibial Component	Type of Revision								
		N Revised	N Total	TKR	Femoral	Tibial	Other	5 Yrs	10 Yrs	15 Yrs
AGC	AGC*	350	5028	162	5	26	157	3.2 (2.8, 3.8)	4.9 (4.3, 5.6)	7.6 (6.8, 8.5)
Active Knee	Active Knee	934	11106	282	30	43	579	4.6 (4.2, 5.0)	7.8 (7.2, 8.4)	11.1 (10.4, 11.9)
Advance	Advance II*	126	1622	52	3	13	58	5.0 (4.1, 6.2)	6.7 (5.5, 8.1)	8.2 (6.9, 9.8)
Advance	Advance*	77	992	31	4	8	34	6.0 (4.7, 7.7)	8.2 (6.5, 10.2)	8.7 (6.9, 10.9)
BalanSys	BalanSys	155	5003	53	8	9	85	2.5 (2.1, 3.0)	3.9 (3.3, 4.7)	5.2 (4.0, 6.8)
Buechel-Pappas	Buechel-Pappas*	58	467	21	2	2	33	8.1 (5.9, 11.0)	10.7 (8.2, 14.0)	13.4 (10.4, 17.0)
Columbus	Columbus	276	8402	72	12	15	177	3.8 (3.3, 4.3)	6.1 (5.2, 7.2)	8.6 (6.9, 10.6)
Duracon	Duracon*	1391	19830	400	33	68	890	3.5 (3.2, 3.7)	5.2 (4.9, 5.5)	7.3 (6.9, 7.7)
Genesis II CR	Genesis II	1313	26672	283	79	57	894	3.4 (3.2, 3.7)	5.0 (4.7, 5.3)	6.1 (5.8, 6.5)
Genesis II CR	Profix Mobile*	144	1209	60	9	8	67	5.4 (4.2, 6.8)	8.8 (7.3, 10.6)	12.6 (10.6, 14.8)
Genesis II Oxinium CR (ctd)	Genesis II	686	11473	140	37	28	481	3.5 (3.1, 3.9)	5.9 (5.5, 6.5)	8.4 (7.7, 9.1)
Genesis II Oxinium PS (ctd)	Genesis II	1581	22705	243	37	179	1122	4.9 (4.6, 5.2)	7.0 (6.7, 7.4)	9.3 (8.8, 9.9)
Genesis II PS	Genesis II	1013	21014	185	33	62	733	3.6 (3.3, 3.8)	4.9 (4.6, 5.3)	6.2 (5.8, 6.7)
Journey Oxinium	Journey*	430	2975	65	7	33	325	6.5 (5.7, 7.5)	11.3 (10.2, 12.6)	17.1 (15.6, 18.7)
Kinemax Plus	Kinemax Plus*	140	1815	83	4	5	48	3.2 (2.4, 4.1)	4.6 (3.7, 5.7)	7.9 (6.6, 9.4)
LCS CR	LCS	638	8346	262	24	90	262	4.5 (4.0, 4.9)	6.4 (5.9, 7.0)	8.1 (7.5, 8.8)
LCS CR	MBT Duofix*	934	15248	278	38	44	574	4.1 (3.8, 4.4)	5.3 (5.0, 5.7)	7.0 (6.6, 7.5)
LCS CR	MBT*	1626	33003	596	73	162	795	3.5 (3.3, 3.7)	4.9 (4.6, 5.1)	6.1 (5.8, 6.4)
LCS Duofix	MBT Duofix*	546	3606	375	27	8	136	10.2 (9.2, 11.2)	13.3 (12.3, 14.5)	15.6 (14.4, 16.9)
LCS Duofix	MBT*	149	1169	101	9	2	37	8.1 (6.7, 9.9)	11.9 (10.1, 13.9)	13.7 (11.7, 15.9)
LCS PS	MBT*	47	482	12	5	1	29	6.6 (4.7, 9.2)	10.4 (7.9, 13.6)	10.4 (7.9, 13.6)
Legion CR	Genesis II	370	10342	72	27	15	256	3.8 (3.4, 4.2)	5.4 (4.7, 6.1)	7.2 (5.9, 8.7)
Legion Oxinium CR	Genesis II	365	12774	86	28	12	239	3.1 (2.8, 3.5)	4.3 (3.8, 4.9)	5.7 (4.8, 6.8)
Legion Oxinium PS	Genesis II	822	19458	126	23	69	604	3.8 (3.5, 4.1)	5.2 (4.8, 5.5)	7.9 (6.9, 9.1)
Legion PS	Genesis II	234	6435	60	5	11	158	3.1 (2.7, 3.6)	4.2 (3.7, 4.8)	6.3 (4.5, 8.7)
MBK (Zimmer)	Nexgen*	41	448	23	1	2	15	4.1 (2.6, 6.5)	6.2 (4.2, 8.9)	8.2 (5.8, 11.4)
MRK	MRK	35	855	9	1	0	25	3.1 (2.1, 4.5)	4.6 (3.2, 6.6)	6.6 (4.4, 9.6)
Maxim	Maxim*	164	1819	56	11	6	91	3.3 (2.6, 4.3)	5.2 (4.3, 6.4)	9.4 (7.9, 11.1)
Maxim	Vanguard*	101	628	47	6	6	42	5.6 (4.0, 7.7)	8.3 (6.3, 10.9)	14.7 (11.9, 18.2)
Natural Knee Flex	Natural Knee II*	192	6272	51	8	9	124	2.3 (2.0, 2.7)	3.2 (2.7, 3.7)	4.3 (3.6, 5.2)
Natural Knee II	Natural Knee II*	476	6443	227	10	60	179	2.8 (2.4, 3.2)	4.9 (4.4, 5.5)	8.3 (7.6, 9.2)
Nexgen CR	Nexgen TM CR*	61	867	22	5	11	23	5.3 (4.0, 7.1)	6.4 (4.9, 8.3)	7.8 (6.0, 10.1)
Nexgen CR	Nexgen*	467	11582	155	23	33	256	2.2 (1.9, 2.5)	3.1 (2.8, 3.5)	4.5 (4.0, 4.9)
Nexgen CR Flex	Nexgen TM CR*	398	12311	147	23	31	197	2.2 (1.9, 2.5)	3.1 (2.7, 3.4)	4.2 (3.8, 4.7)
Nexgen CR Flex	Nexgen*	1821	60434	481	119	139	1082	2.3 (2.2, 2.4)	3.1 (3.0, 3.3)	4.0 (3.7, 4.2)
Nexgen LCKK	Nexgen	57	987	10	3	1	43	4.5 (3.4, 6.1)	5.9 (4.4, 7.8)	9.2 (6.5, 13.0)

Femoral Component	Tibial Component	Type of Revision								
		N Revised	N Total	TKR	Femoral	Tibial	Other	5 Yrs	10 Yrs	15 Yrs
Nexgen LPS	Nexgen TM LPS*	43	1476	15	4	7	17	2.1 (1.5, 3.0)	2.6 (1.9, 3.7)	3.5 (2.5, 4.8)
Nexgen LPS	Nexgen*	395	7024	108	22	34	231	3.3 (2.9, 3.7)	4.8 (4.3, 5.3)	6.5 (5.8, 7.2)
Nexgen LPS Flex	Nexgen	1853	37836	554	74	262	963	3.1 (3.0, 3.3)	4.8 (4.6, 5.0)	6.3 (6.0, 6.7)
Nexgen LPS Flex	Nexgen TM LPS*	81	1576	39	5	7	30	3.4 (2.6, 4.5)	4.4 (3.5, 5.6)	6.2 (4.9, 7.9)
Optetrak-CR	Optetrak*	63	504	28	3	4	28	6.1 (4.3, 8.7)	10.2 (7.7, 13.3)	14.8 (11.5, 18.9)
Optetrak-PS	Optetrak RBK*	108	1112	39	3	3	63	5.9 (4.7, 7.5)	8.6 (7.1, 10.5)	12.4 (10.2, 15.0)
Optetrak-PS	Optetrak*	380	2365	195	10	31	144	6.4 (5.4, 7.4)	12.2 (10.9, 13.7)	18.7 (17.0, 20.6)
PFC Sigma CR	MBT Duofix*	177	3314	32	18	6	121	3.4 (2.9, 4.1)	4.5 (3.8, 5.3)	6.1 (5.2, 7.2)
PFC Sigma CR	MBT*	362	6273	84	35	46	197	3.9 (3.4, 4.4)	5.0 (4.5, 5.6)	6.2 (5.6, 6.9)
PFC Sigma CR	PFC Sigma*	982	24917	259	59	71	593	2.5 (2.3, 2.7)	3.5 (3.3, 3.8)	4.8 (4.5, 5.1)
PFC Sigma PS	MBT Duofix*	187	2212	45	4	6	132	5.9 (5.0, 6.9)	7.8 (6.7, 9.0)	9.7 (8.4, 11.2)
PFC Sigma PS	MBT*	407	6334	150	17	25	215	4.0 (3.5, 4.5)	5.4 (4.8, 6.0)	7.3 (6.6, 8.1)
PFC Sigma PS	PFC Sigma*	413	8041	149	14	28	222	3.3 (2.9, 3.7)	4.7 (4.3, 5.3)	6.1 (5.5, 6.7)
Profix	Profix Mobile*	114	986	43	6	5	60	8.2 (6.6, 10.1)	9.9 (8.1, 12.0)	12.0 (10.0, 14.3)
Profix	Profix*	323	5370	82	13	18	210	3.8 (3.3, 4.3)	5.4 (4.8, 6.1)	6.4 (5.7, 7.1)
Profix Oxinium (ctd)	Profix*	119	1049	29	5	14	71	7.0 (5.6, 8.7)	8.9 (7.3, 10.8)	10.7 (8.9, 12.8)
RBK	RBK*	638	11019	259	21	44	314	3.9 (3.6, 4.3)	5.4 (5.0, 5.8)	6.7 (6.2, 7.3)
Rocc	Rocc*	46	575	18	1	2	25	5.2 (3.6, 7.3)	6.8 (5.0, 9.3)	8.3 (6.2, 11.1)
Rotaglide Plus	Rotaglide Plus*	87	616	43	1	5	38	5.8 (4.1, 8.0)	11.2 (8.8, 14.2)	15.2 (12.3, 18.7)
Score	Score	454	6400	188	23	12	231	5.6 (5.1, 6.3)	9.0 (8.1, 9.9)	10.7 (9.6, 11.9)
Scorpio CR	Scorpio+*	221	2448	56	10	34	121	4.3 (3.6, 5.2)	7.1 (6.2, 8.3)	9.2 (8.0, 10.5)
Scorpio CR	Series 7000*	696	11561	183	28	48	437	3.3 (3.0, 3.6)	5.1 (4.7, 5.5)	6.9 (6.4, 7.5)
Scorpio NRG CR	Series 7000*	248	5070	72	15	13	148	3.2 (2.7, 3.7)	4.6 (4.0, 5.2)	6.3 (5.5, 7.2)
Scorpio NRG PS	Series 7000*	209	3931	46	9	20	134	3.7 (3.1, 4.3)	4.5 (3.9, 5.3)	6.3 (5.5, 7.3)
Scorpio PS	Scorpio*	37	524	11	0	11	15	4.5 (3.0, 6.7)	6.1 (4.3, 8.6)	7.3 (5.2, 10.2)
Scorpio PS	Scorpio+*	169	2036	52	14	10	93	5.1 (4.2, 6.1)	6.7 (5.7, 8.0)	8.4 (7.2, 9.8)
Scorpio PS	Series 7000*	382	4696	136	10	70	166	4.7 (4.1, 5.3)	6.9 (6.1, 7.7)	8.9 (8.1, 9.9)
Triathlon CR	Triathlon	4360	187428	819	173	214	3154	2.3 (2.3, 2.4)	3.5 (3.4, 3.6)	4.7 (4.5, 4.9)
Triathlon PS	Triathlon	704	15654	138	38	86	442	3.7 (3.4, 4.0)	5.2 (4.8, 5.6)	6.5 (5.9, 7.1)
Vanguard CR	Vanguard	1224	27180	311	45	72	796	2.9 (2.7, 3.1)	4.6 (4.4, 4.9)	6.9 (6.4, 7.5)
Vanguard PS	Vanguard*	378	5273	108	7	61	202	5.2 (4.6, 5.8)	7.3 (6.5, 8.0)	9.4 (8.3, 10.6)
<b>TOTAL</b>		<b>34078</b>	<b>748622</b>	<b>9619</b>	<b>1459</b>	<b>2537</b>	<b>20463</b>			

Note: Only prostheses with >350 procedures have been listed

\* denotes prosthesis combinations that have not had any reported use in primary total knee procedures in 2024

## Twenty Year Outcomes

The Registry has information on 56 hip and 40 knee prosthesis combinations that have been used in >350 procedures for osteoarthritis and have a follow-up of at least 20 years.

### HIP REPLACEMENT

The listed prosthesis combinations have been used in 45.8% of all primary total conventional hip replacement procedures performed for osteoarthritis. The 20 year cumulative percent revision ranges from 3.9% to 26.3% (Table CP7).

**Table CP7 Cumulative Percent Revision of Primary Total Conventional Hip Replacement Combinations with 20 Year Data (Primary Diagnosis OA)**

Femoral Component	Acetabular Component	N Revised	Type of Revision						10 Yrs	15 Yrs	20 Yrs
			N Total	THR	Femoral	Acetabular	Other				
ABGII	ABGII (Shell/Insert)*	105	853	21	56	19	9	6.6 (5.1, 8.6)	10.6 (8.6, 13.1)	17.2 (14.2, 20.8)	
ABGII	ABGII*	379	2772	65	183	90	41	6.8 (5.9, 7.9)	11.9 (10.7, 13.3)	17.6 (15.9, 19.4)	
ABGII	Trident (Shell)*	302	2439	17	188	39	58	8.5 (7.4, 9.7)	13.2 (11.8, 14.9)	18.2 (16.0, 20.7)	
Accolade I	Trident (Shell)*	610	8574	71	252	113	174	5.7 (5.2, 6.2)	7.5 (6.9, 8.2)	9.3 (8.5, 10.3)	
Alloclassic	Allofit*	351	5170	42	153	61	95	5.0 (4.4, 5.7)	7.7 (6.9, 8.6)	10.3 (9.1, 11.5)	
Alloclassic	Fitmore*	150	1709	16	74	20	40	7.5 (6.3, 8.9)	9.6 (8.2, 11.4)	11.3 (9.5, 13.4)	
Alloclassic	Metasul*	26	371	6	2	12	6	5.1 (3.3, 8.1)	6.6 (4.4, 9.8)	7.0 (4.7, 10.5)	
C-Stem	Duraloc*	97	894	13	26	14	44	6.9 (5.3, 8.9)	11.9 (9.6, 14.7)	16.8 (13.7, 20.5)	
C-Stem	Elite Plus LPW*	25	367	11	5	9	0	5.3 (3.3, 8.6)	8.5 (5.6, 12.8)	11.3 (7.4, 17.0)	
CLS	Allofit*	71	817	9	37	16	9	6.1 (4.6, 8.0)	8.8 (6.9, 11.3)	11.8 (9.3, 15.0)	
CORAIL	Duraloc*	117	1267	23	48	19	27	5.1 (4.0, 6.6)	9.6 (7.8, 11.7)	15.0 (12.2, 18.4)	
CORAIL	PINNACLE	2504	63365	227	962	369	946	4.5 (4.3, 4.7)	7.0 (6.6, 7.4)	8.6 (7.5, 9.8)	
CPCS	Reflection (Cup)	88	863	28	6	41	13	7.9 (6.0, 10.4)	17.3 (13.8, 21.6)	26.3 (20.5, 33.2)	
CPCS	Reflection (Shell)	117	2868	17	51	14	35	3.2 (2.6, 4.0)	5.4 (4.4, 6.6)	8.3 (6.5, 10.5)	
CPT	Trilogy	435	7897	48	172	46	169	5.5 (5.0, 6.1)	7.0 (6.3, 7.7)	8.2 (7.2, 9.4)	
CPT	ZCA	43	868	16	10	10	7	4.5 (3.2, 6.3)	6.1 (4.3, 8.5)	8.8 (6.0, 12.7)	
Charnley	Charnley Ogee*	69	630	41	9	7	12	9.1 (7.0, 12.0)	13.7 (10.7, 17.4)	17.1 (13.1, 22.2)	
Charnley	Charnley*	55	563	44	7	3	1	6.5 (4.6, 9.1)	10.4 (7.8, 13.8)	13.7 (10.4, 18.0)	
Charnley	Vitalock*	44	370	9	20	4	11	7.9 (5.5, 11.4)	11.5 (8.4, 15.7)	14.8 (11.0, 19.7)	
Citation	Trident (Shell)*	66	1036	4	19	18	25	4.4 (3.3, 5.9)	6.0 (4.6, 7.7)	8.3 (6.4, 10.7)	
Citation	Vitalock*	54	508	4	10	21	19	5.2 (3.5, 7.7)	9.1 (6.7, 12.4)	13.1 (10.0, 17.1)	
Elite Plus	Duraloc*	118	953	21	66	7	24	9.2 (7.4, 11.5)	14.9 (12.3, 18.0)	19.3 (16.0, 23.3)	
Epoch	Trilogy*	49	990	1	9	11	28	4.5 (3.3, 6.0)	5.1 (3.9, 6.8)	5.4 (4.1, 7.1)	
Exeter	Contemporary*	40	428	11	7	14	8	6.0 (4.0, 8.9)	12.6 (9.1, 17.5)	15.4 (11.0, 21.3)	
Exeter	Vitalock*	81	1076	16	16	29	20	4.6 (3.4, 6.1)	6.8 (5.3, 8.8)	9.2 (7.3, 11.7)	
Exeter V40	ABGII*	44	976	10	14	13	7	3.4 (2.4, 4.8)	4.4 (3.2, 6.1)	5.7 (4.1, 7.9)	
Exeter V40	Contemporary*	325	4609	89	50	151	35	5.5 (4.8, 6.2)	8.7 (7.7, 9.9)	14.0 (12.2, 16.1)	
Exeter V40	Exeter	138	1635	32	17	67	22	4.6 (3.6, 5.8)	9.7 (8.0, 11.6)	15.1 (12.6, 18.0)	
Exeter V40	Exeter Contemporary	183	2978	59	37	62	25	4.5 (3.8, 5.4)	7.7 (6.6, 9.1)	11.5 (9.3, 14.1)	
Exeter V40	Mallory-Head*	50	1434	9	28	5	8	2.3 (1.6, 3.3)	4.0 (2.9, 5.4)	5.8 (4.1, 8.2)	
Exeter V40	Trident (Shell)	2511	82698	345	825	306	1035	3.5 (3.3, 3.6)	4.9 (4.7, 5.2)	6.3 (5.9, 6.7)	
Exeter V40	Trilogy*	18	517	2	5	2	9	3.6 (2.2, 5.8)	3.9 (2.5, 6.2)	3.9 (2.5, 6.2)	
Exeter V40	Vitalock*	102	1795	20	28	28	26	3.2 (2.5, 4.2)	5.0 (4.0, 6.3)	8.2 (6.6, 10.1)	
F2L	SPH-Blind*	67	571	11	20	19	17	7.6 (5.7, 10.2)	11.5 (9.0, 14.7)	13.7 (10.9, 17.3)	

Femoral Component	Acetabular Component	Type of Revision								
		N Revised	N Total	THR	Femoral	Acetabular	Other	10 Yrs	15 Yrs	20 Yrs
MS 30	Allofit*	69	1539	14	22	20	13	3.5 (2.6, 4.6)	5.8 (4.4, 7.5)	7.5 (5.7, 10.0)
MS 30	Fitmore	32	830	1	9	9	13	3.1 (2.0, 4.8)	6.6 (4.4, 9.7)	8.8 (5.8, 13.1)
MS 30	Low Profile Cup	28	606	12	3	11	2	2.8 (1.6, 4.8)	5.0 (3.0, 8.2)	11.5 (7.2, 18.2)
Mallory-Head	Mallory-Head*	234	2908	19	14	86	115	4.6 (3.9, 5.5)	8.0 (6.9, 9.2)	12.1 (10.5, 14.0)
Meridian	Vitalock*	45	354	2	3	18	22	6.7 (4.4, 10.0)	11.4 (8.3, 15.5)	15.3 (11.5, 20.1)
Natural Hip	Fitmore*	46	882	2	8	15	21	4.2 (3.0, 5.9)	4.9 (3.5, 6.7)	6.3 (4.7, 8.6)
Omnifit	Secur-Fit*	92	716	10	24	24	34	9.9 (7.9, 12.5)	13.4 (10.8, 16.4)	15.8 (12.9, 19.3)
Omnifit	Trident (Shell)*	172	3841	15	42	32	83	3.9 (3.3, 4.6)	4.9 (4.2, 5.8)	6.4 (5.3, 7.6)
S-Rom	Duraloc Option*	27	523	4	9	5	9	4.6 (3.0, 6.8)	5.0 (3.4, 7.3)	5.6 (3.8, 8.0)
S-Rom	PINNACLE	162	2669	16	91	16	39	5.7 (4.8, 6.7)	6.8 (5.8, 8.0)	9.2 (6.8, 12.4)
SL-Plus	EP-Fit Plus	126	2136	5	55	23	43	5.3 (4.4, 6.4)	6.4 (5.4, 7.6)	7.3 (6.0, 8.7)
Secur-Fit	Trident (Shell)	549	9916	40	243	99	167	4.8 (4.4, 5.3)	6.5 (5.9, 7.1)	8.1 (7.3, 9.0)
Secur-Fit Plus HA	Trident (Shell)*	161	3125	11	37	38	75	3.5 (2.9, 4.2)	4.6 (3.9, 5.5)	5.7 (4.9, 6.7)
Spectron EF	Reflection (Cup)	128	1406	50	12	57	9	7.2 (5.8, 8.9)	12.9 (10.8, 15.5)	15.8 (13.0, 19.2)
Spectron EF	Reflection (Shell)*	334	4646	72	113	50	99	5.3 (4.6, 6.1)	8.7 (7.7, 9.7)	11.8 (10.5, 13.3)
Stability	Duraloc*	58	374	4	10	18	26	8.9 (6.3, 12.5)	15.9 (12.1, 20.6)	19.9 (15.4, 25.4)
Summit	PINNACLE*	204	5772	15	48	36	105	3.4 (2.9, 4.0)	4.8 (4.1, 5.7)	6.4 (5.0, 8.3)
Summit	PINNACLE*MoM	97	730	11	7	19	60	8.9 (7.0, 11.3)	11.9 (9.6, 14.7)	17.5 (14.2, 21.4)
Synergy	Reflection (Shell)*	434	7543	39	88	152	155	3.9 (3.5, 4.4)	5.6 (5.0, 6.2)	7.6 (6.9, 8.4)
Taperloc	M2a*MoM	70	471	14	2	46	8	12.2 (9.5, 15.6)	15.0 (12.0, 18.8)	16.7 (13.2, 21.1)
Taperloc	Mallory-Head*	104	1903	10	23	32	39	4.7 (3.8, 5.8)	6.6 (5.3, 8.3)	11.3 (8.6, 14.9)
VerSys	Trilogy*	270	4432	20	93	50	107	5.2 (4.6, 5.9)	6.1 (5.4, 6.9)	7.3 (6.5, 8.3)
<b>TOTAL</b>		<b>12876</b>	<b>262183</b>	<b>1744</b>	<b>4368</b>	<b>2515</b>	<b>4249</b>			

Note: Only prostheses with >350 procedures have been listed

\* denotes prosthesis combinations with no reported use in primary total conventional knee procedures in 2024

**Table CP8 Cumulative Percent Revision of Primary Total Knee Replacement Combinations with 20 Year Data  
(Primary Diagnosis OA)**

Femoral Component	Tibial Component	N Revised	Type of Revision						10 Yrs	15 Yrs	20 Yrs
			N Total	TKR	Femoral	Tibial	Other				
AGC	AGC*	350	5028	162	5	26	157	4.9 (4.3, 5.6)	7.6 (6.8, 8.5)	10.3 (9.2, 11.5)	
Active Knee	Active Knee	934	11106	282	30	43	579	7.8 (7.2, 8.4)	11.1 (10.4, 11.9)	13.9 (12.9, 15.0)	
Advance	Advance II*	126	1622	52	3	13	58	6.7 (5.5, 8.1)	8.2 (6.9, 9.8)	10.7 (8.7, 13.0)	
Duracon	Duracon*	1391	19830	400	33	68	890	5.2 (4.9, 5.5)	7.3 (6.9, 7.7)	9.2 (8.7, 9.7)	
Genesis II CR	Genesis II	1313	26672	283	79	57	894	5.0 (4.7, 5.3)	6.1 (5.8, 6.5)	7.4 (6.9, 7.9)	
Genesis II CR	Profix Mobile*	144	1209	60	9	8	67	8.8 (7.3, 10.6)	12.6 (10.6, 14.8)	15.1 (12.8, 17.8)	
Genesis II Oxinium CR (ctd)	Genesis II	686	11473	140	37	28	481	5.9 (5.5, 6.5)	8.4 (7.7, 9.1)	10.6 (9.7, 11.6)	
Genesis II Oxinium PS (ctd)	Genesis II	1581	22705	243	37	179	1122	7.0 (6.7, 7.4)	9.3 (8.8, 9.9)	11.9 (10.8, 13.1)	
Genesis II PS	Genesis II	1013	21014	185	33	62	733	4.9 (4.6, 5.3)	6.2 (5.8, 6.7)	7.2 (6.7, 7.9)	
Kinemax Plus	Kinemax Plus*	140	1815	83	4	5	48	4.6 (3.7, 5.7)	7.9 (6.6, 9.4)	10.0 (8.5, 11.9)	
LCS CR	LCS	638	8346	262	24	90	262	6.4 (5.9, 7.0)	8.1 (7.5, 8.8)	9.3 (8.6, 10.0)	
LCS CR	MBT Duofix*	934	15248	278	38	44	574	5.3 (5.0, 5.7)	7.0 (6.6, 7.5)	8.6 (8.0, 9.3)	
LCS CR	MBT*	1626	33003	596	73	162	795	4.9 (4.6, 5.1)	6.1 (5.8, 6.4)	7.9 (7.3, 8.6)	
MBK (Zimmer)	Nexgen*	41	448	23	1	2	15	6.2 (4.2, 8.9)	8.2 (5.8, 11.4)	11.4 (8.3, 15.6)	
Maxim	Maxim*	164	1819	56	11	6	91	5.2 (4.3, 6.4)	9.4 (7.9, 11.1)	13.7 (11.6, 16.1)	
Maxim	Vanguard*	101	628	47	6	6	42	8.3 (6.3, 10.9)	14.7 (11.9, 18.2)	22.4 (18.5, 26.9)	
Natural Knee II	Natural Knee II*	476	6443	227	10	60	179	4.9 (4.4, 5.5)	8.3 (7.6, 9.2)	11.1 (10.0, 12.2)	
Nexgen CR	Nexgen TM CR*	61	867	22	5	11	23	6.4 (4.9, 8.3)	7.8 (6.0, 10.1)	10.7 (7.4, 15.3)	
Nexgen CR	Nexgen*	467	11582	155	23	33	256	3.1 (2.8, 3.5)	4.5 (4.0, 4.9)	5.8 (5.2, 6.4)	
Nexgen CR Flex	Nexgen*	1821	60434	481	119	139	1082	3.1 (3.0, 3.3)	4.0 (3.7, 4.2)	4.8 (4.3, 5.4)	
Nexgen LPS	Nexgen*	395	7024	108	22	34	231	4.8 (4.3, 5.3)	6.5 (5.8, 7.2)	7.9 (7.1, 8.9)	
Nexgen LPS Flex	Nexgen	1853	37836	554	74	262	963	4.8 (4.6, 5.0)	6.3 (6.0, 6.7)	8.1 (7.5, 8.8)	
Optetrak-CR	Optetrak*	63	504	28	3	4	28	10.2 (7.7, 13.3)	14.8 (11.5, 18.9)	15.3 (11.9, 19.5)	
Optetrak-PS	Optetrak*	380	2365	195	10	31	144	12.2 (10.9, 13.7)	18.7 (17.0, 20.6)	21.5 (19.3, 23.8)	
PFC Sigma CR	MBT Duofix*	177	3314	32	18	6	121	4.5 (3.8, 5.3)	6.1 (5.2, 7.2)	9.3 (7.4, 11.6)	
PFC Sigma CR	MBT*	362	6273	84	35	46	197	5.0 (4.5, 5.6)	6.2 (5.6, 6.9)	8.2 (7.2, 9.3)	
PFC Sigma CR	PFC Sigma*	982	24917	259	59	71	593	3.5 (3.3, 3.8)	4.8 (4.5, 5.1)	6.6 (5.9, 7.2)	
PFC Sigma PS	MBT Duofix*	187	2212	45	4	6	132	7.8 (6.7, 9.0)	9.7 (8.4, 11.2)	11.2 (8.6, 14.4)	
PFC Sigma PS	MBT*	407	6334	150	17	25	215	5.4 (4.8, 6.0)	7.3 (6.6, 8.1)	9.4 (8.1, 10.9)	
PFC Sigma PS	PFC Sigma*	413	8041	149	14	28	222	4.7 (4.3, 5.3)	6.1 (5.5, 6.7)	7.9 (6.9, 9.1)	
Profix	Profix Mobile*	114	986	43	6	5	60	9.9 (8.1, 12.0)	12.0 (10.0, 14.3)	13.5 (11.2, 16.2)	
Profix	Profix*	323	5370	82	13	18	210	5.4 (4.8, 6.1)	6.4 (5.7, 7.1)	7.6 (6.7, 8.5)	
Profix Oxinium (ctd)	Profix*	119	1049	29	5	14	71	8.9 (7.3, 10.8)	10.7 (8.9, 12.8)	13.7 (11.4, 16.4)	
RBK	RBK*	638	11019	259	21	44	314	5.4 (5.0, 5.8)	6.7 (6.2, 7.3)	8.3 (7.4, 9.2)	
Rotaglide Plus	Rotaglide Plus*	87	616	43	1	5	38	11.2 (8.8, 14.2)	15.2 (12.3, 18.7)	18.2 (14.8, 22.3)	
Scorpio CR	Scorpio+*	221	2448	56	10	34	121	7.1 (6.2, 8.3)	9.2 (8.0, 10.5)	10.9 (9.5, 12.4)	
Scorpio CR	Series 7000*	696	11561	183	28	48	437	5.1 (4.7, 5.5)	6.9 (6.4, 7.5)	8.1 (7.5, 8.8)	
Scorpio PS	Scorpio*	37	524	11	0	11	15	6.1 (4.3, 8.6)	7.3 (5.2, 10.2)	9.5 (6.7, 13.3)	
Scorpio PS	Scorpio+*	169	2036	52	14	10	93	6.7 (5.7, 8.0)	8.4 (7.2, 9.8)	9.9 (8.3, 11.7)	
Scorpio PS	Series 7000*	382	4696	136	10	70	166	6.9 (6.1, 7.7)	8.9 (8.1, 9.9)	10.5 (9.4, 11.7)	
<b>TOTAL</b>		<b>22012</b>	<b>400417</b>	<b>6535</b>	<b>944</b>	<b>1814</b>	<b>12719</b>				

Note: \* denotes prosthesis combinations with no reported use in primary total conventional hip procedures in 2024



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ASSOCIATION

Australian  
Orthopaedic  
Association  
National  
Joint  
Replacement  
Registry

AOANJRR  
SAHMRI Building  
North Terrace, Adelaide SA 5000  
T: +61 8 8128 4280

[aoanjrr.sahmri.com](http://aoanjrr.sahmri.com)  
[aoa.org.au](http://aoa.org.au)

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