

ATTUNE® Knee System

Registry Data

June 2021



ATTUNE KNEE SYSTEM CLINICAL EVIDENCE DECK

The following modular deck is intended to provide internal personnel and KOL's with the ability to create a custom presentation using only the approved slides contained within, to ensure that the final presentation is consistent with approved product labeling.

NO CONTENT CAN BE CHANGED OR ADDED, NOR CAN ANY NEW SLIDES BE ADDED

- The introduction slide (Slide 1) should be included in every presentation and may be modified by the speaker to reflect the presentation agenda.
- This deck is also meant to serve as the most up to date registry data to be used in the ATTUNE Clinical Evidence Presentation registry data section as indicated by the place holder slide in that presentation.
- Please select the appropriate slides to include within your presentation.
 - Rearrange the slides based on the topics you would like to cover.
 - Remove the slides that do not pertain to the topics of your presentation.

PLEASE REMOVE THIS SLIDE BEFORE PRESENTING

National Joint Registries

- **Michigan Arthroplasty Registry**
- **Kaiser Permanente Total Joint Registry**
- **17th Annual NJR Published Report**
- **AOANJRR 2020 Published, Annual Report**
- **New Zealand 2020 Published, Annual Report**



Stability in Motion™

ATTUNE® KNEE IMPLANT SURVIVORSHIP

Published Annual Reports

≥96.6%

Implant Survivorship for
the ATTUNE Knee at five
year follow-up¹⁻³

On aggregate, the ATTUNE Knee is performing in line with the class of TKA as demonstrated by joint registries.¹⁻⁴



1. National Joint Registry for England, Wales, Northern Ireland and the Isle of Man, 17th Annual Report. (2020). Table 3.K7(a). Full summary of all data is available from: www.njrreports.org.uk

2. Hughes RE, Hallstrom BR, Zheng H, Kabara J, Cowen M, Igrisan R, Richmond A. (2019) Michigan Arthroplasty Registry Collaborative Quality Initiative (MARCQI) Report: 2012-2018. University of Michigan, Ann Arbor.

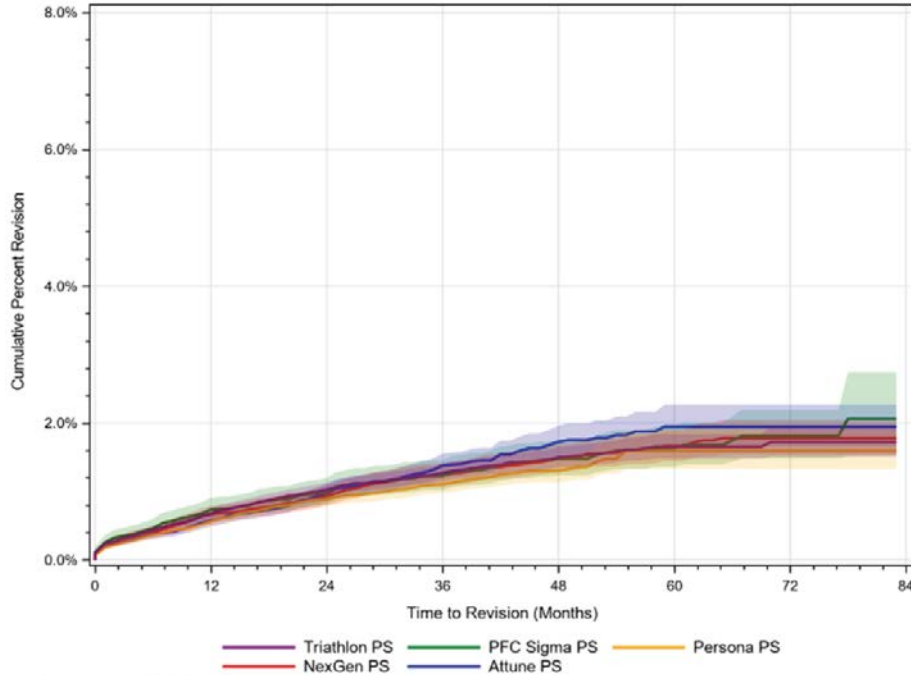
3 Australian Orthopaedic Association National Joint Replacement Registry (AOANJRR). Hip Knee & Shoulder Arthroplasty Annual Report 2020, AOA, Adelaide; 2020: 249, 281-282, Tables KT7, KT33, KT34. (Accessed 1 October 2020 from <https://aoanjrr.sahmri.com/annual-reports-2020>)

Femoral Component	Tibial Component	N Revised	N Total	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	19 Yrs
Attune CR	Attune	290	15300	0.9 (0.8, 1.1)	2.4 (2.1, 2.7)	3.0 (2.7, 3.5)			
Attune PS	Attune	111	7179	0.8 (0.6, 1.1)	1.9 (1.6, 2.4)	2.6 (2.1, 3.3)			
TOTAL		15100	417024						

4. The New Zealand Joint Registry Twenty One Year Report, Revision Rate of Individual Knee Prostheses, P. 89. Please note, the above table only includes selected TKR products based on the four largest device manufacturers by worldwide sales. Full summary of all data is available from: <http://nzoa.org.nz/nz-joint-registry>.

AAOS AMERICAN JOINT REGISTRY REPORT PS SUPPLEMENT 2020

Figure 2.4 Five Most Used Constructs: Posterior Stabilized Fixed Bearing Tibial Baseplate Designs for Primary Total Knee Arthroplasty in Patients ≥ 65 Years of Age for All Causes for Revision 2012-2019*



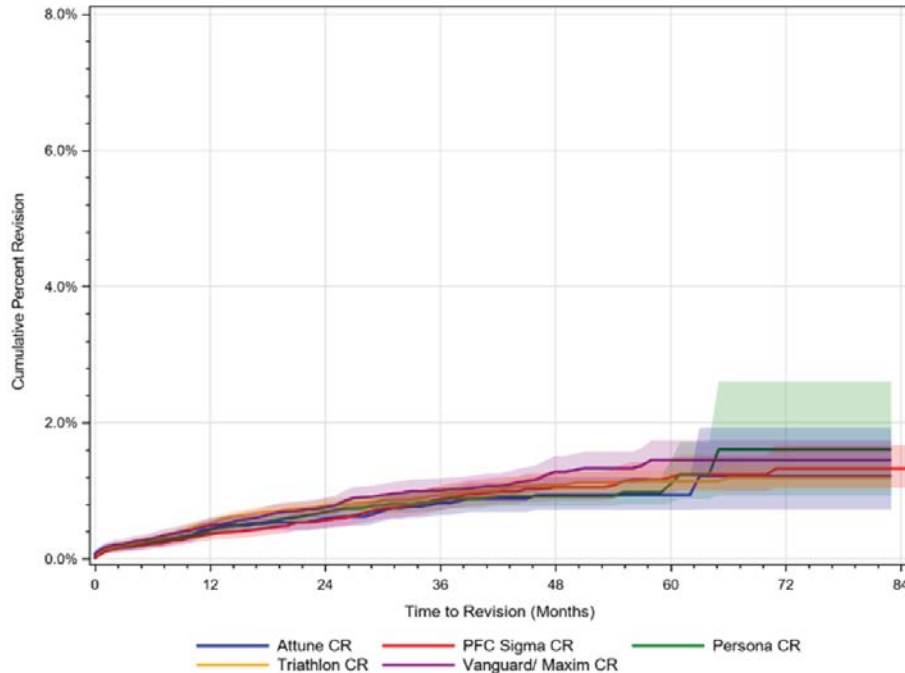
*The knee constructs include all fixations.

Group Name	Total	Failure Events	Not Failed	Competing Events (Death)	Percent without Event
Triathlon® PS	42,331	469	41,303	559	98.9%
Persona® PS	33,915	297	33,369	249	99.1%
NexGen® PS	18,171	239	17,561	371	98.7%
ATTUNE® PS	29,699	317	29,141	241	98.9%
P.F.C.™ SIGMA® PS	11,569	143	11,155	271	98.7%
Total	135,685	1,465	132,529	1,691	98.9%

AJRR subset: patients ≥ 65 yo
Posterior Stabilized Fixed Bearing TKA

AAOS AMERICAN JOINT REGISTRY REPORT CR SUPPLEMENT 2020

Figure 2.5 Five Most Used Constructs: Cruciate Retaining Fixed Bearing Tibial Baseplate Designs for Primary Total Knee Arthroplasty in Patients ≥ 65 Years of Age for All Causes for Revision 2012-2019*



*The knee constructs include all fixations.

Group Name	Total	Failure Events	Not Failed	Competing Events (Death)	Percent without Event
Triathlon® CR	37,356	287	36,657	412	99.2%
Persona® CR	23,788	160	23,440	188	99.3%
Vanguard/Maxim® CR	19,106	169	18,690	247	99.1%
P.F.C.™ SIGMA® CR	13,845	110	13,492	243	99.2%
ATTUNE® CR	12,826	82	12,661	83	99.4%
Total	106,921	808	104,940	1,173	99.2%

AJRR subset: patients ≥ 65 yo
Cruciate Retaining Fixed Bearing TKA

MICHIGAN ARTHROPLASTY REGISTRY COLLABORATIVE QUALITY INITIATIVE (MARCQI)¹

Background

- State of Michigan, registry started in 2012, N=61 hospitals (N=87,765 hips and 161,496 knees)
- Quality Initiative: Collaborative meetings with members (3-4 meetings per year)
- PROMs collected: PROMIS-10, HOOS JR, KOOS JR within a standard timeline

Data from the MARCQI 2012-2018 Report indicates implant survivorship for the ATTUNE[®] Knee is consistent with the class of primary TKA.¹

- The ATTUNE Knee has been implanted by 75 surgeons at 36 centers
- 62.8% women, Mean Age=66.2, mean BMI=33.3

	N	Cumulative Percent Revision Rate Estimates (95% Confidence Intervals)				
		1 yr	2 yrs	3 yrs	4 yrs	5yrs
ATTUNE [®] Knee	8,225	0.72 (0.55,0.94)	1.66 (1.37,2.00)	2.37 (1.99,2.82)	3.15 (2.65,3.76)	3.36 (2.74,4.13)
Class of TKA	135,839	0.90 (0.85,0.95)	1.79 (1.71,1.87)	2.41 (2.31,2.51)	2.84 (2.73,2.96)	3.19 (3.06,3.33)

Kaiser ISAR 2018 Presentation- a US Registry

Equivalent Implant Survivorship (FB ATTUNE Knee vs FB SIGMA Knee)

Kaiser Total Joint Registry

- Between 2013-2015
 - **AOX™ Antioxidant Polyethylene Group:** N=1,707
FB ATTUNE Knee (80% PS)
 - **XLK Group:** N=2,984 FB SIGMA Knee (55% PS)
- Evaluated revision risk using Cox Proportional hazard regression with propensity score weighting on age, gender, BMI, diagnosis, ASA score & stability (CR/PS)

Results¹

- **No difference in short-term revision risk**
- **2 yr. Cumulative Percent Revision < 2% for both cohorts**

N= 16 ATTUNE Knee revisions

N= 39 SIGMA Knee revisions, similar reasons/rates

H.R: 0.86 (95%C.I. 0.4-1.59), p=0.638

Conclusions:

- Short-term (2 yr. follow-up) suggests similar risk of revision
- Low cumulative % revision rates for both cohorts
- No evidence of ATTUNE Knee tibial loosening at 2 yrs in this population
- Kaiser TJR is able to provide US post-market surveillance of a new TKA

	ATTUNE Knee (N=16) # (%)	SIGMA Knee (N=39) # (%)
Infection	9 (0.53%)	24 (0.8%)
Wound drainage	4 (0.23%)	5 (0.17%)
Wound dehiscence	3 (0.18%)	4 (0.13%)
Instability	2 (0.12%)	6 (0.2%)
Arthrofibrosis	1 (0.06%)	1 (0.03%)
PF Joint malfunction	1 (0.06%)	1 (0.03%)
Liner wear	1 (0.06%)	0 (0%)
Aseptic loosening	0 (0%)	3 (0.1%)
Pain	0 (0%)	3 (0.1%)
Other	1 (0.06%)	1 (0.03%)

>1 reason for revision possible



National Joint Registry for England, Wales, Northern Ireland and Isle of Man (NJR), 17th Annual Report, 2020

UK NJR tracks primary TKA implants by **cumulative percentage probability of first revision** by main type of implant brand at the indicated number of years after primary operation

Table 3.27 Brand	Number of Knee Joints	Median Age at Primary	Percentage (%) male	Cumulative Percentage Probability of a First Revision (95% CI) if Time Elapsed Since Primary Operation is					
				1 year	3 years	5 years	10 years	13 years	15 years
ATTUNE Knee (FB)	25,723	69 (62-76)	43%	0.41 (0.34-0.50)	1.69 (1.50-1.90)	2.71 (2.32-3.17)			
ATTUNE Knee (RP)	4,254	69 (62-76)	44%	0.21 (0.11-0.43)	1.05 (0.73-1.51)	1.71 (1.17-2.50)			
NexGen®	167,832	70 (64-76)	42%	0.38 (0.35-0.41)	1.35 (1.29-1.41)	2.13 (2.05-2.21)	3.64 (3.51-3.77)	4.45 (4.26-4.65)	4.86 (4.58-5.16)
Persona®(CR)	3,294	70 (63-76)	46%	0.19 (0.08-0.47)	0.54 (0.24-1.19)	<i>2.10 (0.81-5.42)</i>			
Persona®(PS)	1,606	70 (63-76)	42%	0.53 (0.24-01.17)	1.78 (1.08-2.92)	<i>3.99 (2.50-6.32)</i>			
Genesis II™	81,899	71 (65-77)	42%	0.47 (0.42-0.52)	1.57 (1.48-1.67)	2.14 (2.03-2.26)	3.17 (3.00-3.36)	3.49 (3.25-3.75)	3.80 (3.28-4.39)
Triathlon™	133,729	70 (63-76)	43%	0.51 (0.47-0.55)	1.55 (1.48-1.63)	2.19 (2.10-2.29)	3.37 (3.18-3.56)	3.89 (3.56-4.24)	
Vanguard®	80,048	70 (63-76)	42%	0.39 (0.34-0.43)	1.53 (1.44-1.63)	2.18 (2.06-2.30)	3.24 (3.01-3.50)	<i>3.56 (3.20-3.96)</i>	
ALL Total Knee Replacements	1,070,873	70 (63-76)	43%	0.43 (0.42-0.44)	1.56 (1.53-1.58)	2.23 (2.20-2.26)	3.42 (3.38-3.47)	4.23 (4.16-4.30)	4.80 (4.70-4.90)

Estimates in *blue italics* indicate that fewer than 250 cases remain at risk at the time shown.

For more information on the ATTUNE Knee implant Survivorship, available from the Implant Summary Report, see the links below.

Additional survivorship data is now available more frequently to manufacturers who subscribe to the NJR's Implant Summary Report service. New data for the ATTUNE Knee is published and updated as it becomes available at www.ATTUNEevidence.com (US) and www.provingthepromise.com (EMEA).

National Joint Registry for England, Wales, Northern Ireland and the Isle of Man, 17th Annual Report. (2020). Table 3.K7(a). Please note, the above table only includes selected TKR products from table 3.K7(a) based on the four largest device manufacturers by worldwide sales. Full summary of all data is available from: www.njrreports.org.uk

Australian Orthopaedic Association National Joint Replacement Registry 2020 Annual Report

Extracted from Table KT7 Cumulative Percent Revision of Primary Total Knee Replacement with Cemented Fixation									
Femoral Component	Tibial Component	N Revised	N Total	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	18 Yrs
ATTUNE CR	ATTUNE	290	15,300	0.9 (0.8, 1.1)	2.4 (2.1, 2.7)	3.0 (2.7, 3.0)			
ATTUNE PS	ATTUNE	111	7,179	0.8 (0.6, 1.1)	1.9 (1.6, 2.4)	2.6 (2.1, 3.3)			
Genesis II CR	Genesis II	601	15,642	0.9 (0.8, 1.1)	2.4 (2.2, 2.7)	3.1 (2.8, 3.4)	4.4 (4.1, 4.8)	5.8 (5.3, 6.4)	6.7 (5.9, 7.7)
Genesis II PS	Genesis II	740	18,485	1.2 (1.0, 1.3)	2.7 (2.5, 3.0)	3.7 (3.4, 4.0)	5.0 (4.7, 5.4)	6.3 (5.7, 7.0)	
NexGen CR Flex	NexGen	544	28,180	0.7 (0.6, 0.8)	1.5 (1.4, 1.7)	2.0 (1.9, 2.2)	2.9 (2.6, 3.2)	3.7 (3.2, 4.3)	
NexGen LPS Flex	NexGen	1,367	35,150	0.9 (0.8, 1.0)	2.3 (2.1, 2.4)	3.1 (2.9, 3.3)	5.1 (4.8, 5.4)	7.0 (6.5, 7.6)	
Persona CR	Persona	62	6,978	0.8 (0.6, 1.1)	1.9 (1.3, 2.6)	2.5 (1.6, 3.9)			
Persona PS	Persona	32	2,703	0.8 (0.5, 1.3)	1.9 (1.3, 2.8)	1.9 (1.3, 2.8)			
P.F.C. SIGMA CR	P.F.C. SIGMA	441	13,271	0.8 (0.7, 1.0)	2.1 (1.8, 2.3)	2.6 (2.3, 2.9)	3.6 (3.3, 4.0)	5.7 (5.0, 6.5)	
P.F.C. SIGMA PS	P.F.C. SIGMA	351	8,170	1.2 (1.0, 1.4)	2.5 (2.2, 2.9)	3.2 (2.8, 3.6)	4.8 (4.2, 5.3)	6.8 (6.0, 7.8)	
Triathlon CR	Triathlon	1132	50,402	0.8 (0.8, 0.9)	2.0 (1.9, 2.2)	2.5 (2.4, 2.7)	3.9 (3.7, 4.2)		
Triathlon PS	Triathlon	357	8,755	1.5 (1.2, 1.7)	3.1 (2.8, 3.5)	4.0 (3.6, 4.5)	6.1 (5.5, 6.9)		
Vanguard CR	Vanguard	338	11,570	0.7 (0.6, 0.9)	2.1 (1.9, 2.4)	2.7 (2.4, 3.1)	4.8 (4.1, 5.5)		
Vanguard PS	Vanguard	268	4,416	2.1 (1.8, 2.4)	4.5 (3.9, 5.2)	5.6 (5.0, 6.4)	8.0 (7.0, 9.2)		
Table KT33 Cemented Fixation Class data, Minimally stabilized		6,975	223,714	0.8 (0.8, 0.9)	2.2 (2.1, 2.3)	2.9 (2.8, 3.0)	4.4 (4.3, 4.6)	6.4 (6.2, 6.6)	7.9 (7.4, 8.4)
Table KT34 Cemented Fixation Class data, Posterior stabilized		6,816	155,861	1.1 (1.1, 1.2)	2.9 (2.8, 2.9)	3.9 (3.8, 4.0)	5.9 (5.8, 6.1)	7.9 (7.7, 8.2)	10.3 (8.6, 12.3)

New Zealand Joint Registry 21 Year Report, 2020



New Zealand registry tracks TKA implants by **Rate per 100 observed component years**

Prosthesis	Number of Operations	Observed component-years	Number Revised	Rate/100 component-years	Exact 95% confidence interval	
NexGen®	20,066	169,860.4	879	0.517	0.484	0.553
Triathlon™	26,831	138,702.6	575	0.415	0.381	0.449
Genesis II™	14,302	111,106.0	507	0.456	0.417	0.497
P.F.C.™ SIGMA® Knee	11,055	99,557.4	379	0.381	0.343	0.420
ATTUNE® Knee	9,855	24,717.2	144	0.583	0.489	0.684
Vanguard™	2,183	12,779.3	90	0.704	0.566	0.866
Persona®	5,016	11,108.4	88	0.792	0.631	0.971
Journey® II BCS	235	600.5	5	0.833	0.225	1.825
Class of ALL Primary TKA	118,430	841,619	4,024	0.48	0.46	0.49

1. The New Zealand Joint Registry Twenty One Year Report, Revision Rate of Individual Knee Prostheses, P. 89. Please note, the above table only includes selected TKR products based on the four largest device manufacturers by worldwide sales. Full summary of all data is available from:

<http://nzoa.org.nz/nz-joint-registry>

National Joint Registry Subscription Services

- **NJR Implant Summary Report**
- **AOANJRR Automated Industry Report System (AIRS)**



Stability in Motion™

Positive Early Registry Results

The National Joint Registry for England, Wales, Northern Ireland, and Isle of Man (NJR) publishes an annual report including one, three, five year and seven-year outcome data; however, additional implant survivorship data is now also available more frequently to manufacturers who subscribe to the NJR's Implant Summary Report service. The below is from the most recent NJR Implant Summary Report obtained by DePuy Synthes:¹

NJR

98.0%

Implant survivorship at seven years.¹

The **independent analysis** of 34,436 ATTUNE Knee Implantations in the NJR Implant Summary Report,¹ showed that the cumulative revision rate (CRR) for the ATTUNE Knee is 2.0% (95% CI: 1.8, 2.5%) at seven years (98.0% implant survivorship at seven years), which is in line with the overall class of total knee replacement of 2.8% (2.8, 2.8%) CRR at seven years.¹

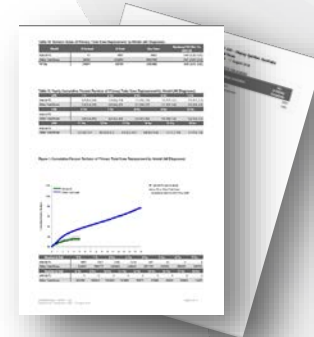
The 8-year estimated cumulative rate of revision for the ATTUNE Knee is currently based on a sample size of 127 knees.¹

1. National Joint Registry for England, Wales, Northern Ireland and the Isle of Man. Implant Summary Report for DePuy ATTUNE CR and ATTUNE PS. NJR Database extract May 6, 2021, pages 1-26. Licensed for use until May 18, 2022. Available at www.ATTUNEevidence.com (US) and www.provingthepromise.com (EMEA).

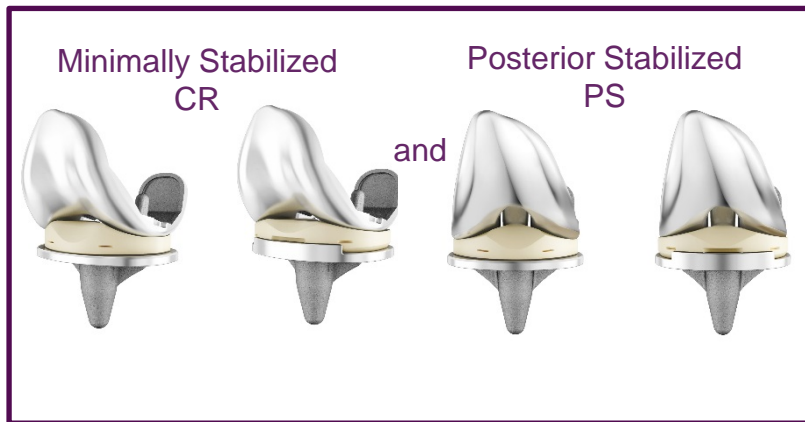
NJR Disclaimer: The data used for this analysis was obtained from the National Joint Registry ("NJR"). The Healthcare Quality Improvement Partnership ("HQIP"), the NJR and/or its contractor, Northgate Public Services (UK) Limited ("NPS") take no responsibility for the accuracy, currency, reliability and correctness of any data used or referred to in this report, nor for the accuracy, currency, reliability and correctness of links or references to other information sources and disclaims all warranties in relation to such data, links and references to the maximum extent permitted by legislation.

INTRODUCING A RECENTLY AVAILABLE, INDEPENDENT REPORT FROM THE AOANJRR

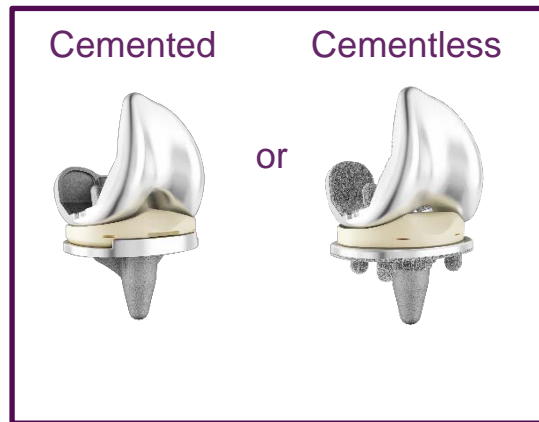
The AOANJRR publishes an annual report with outcomes data at set intervals of one, three, five-year and beyond. Additional implant survivorship data is now also available more frequently to manufacturers who subscribe to the AOANJRR's Automated Industry Report System (AIRS).



AIRS Reports are:



Reported by femoral component: Cruciate Retaining and Posterior Stabilized



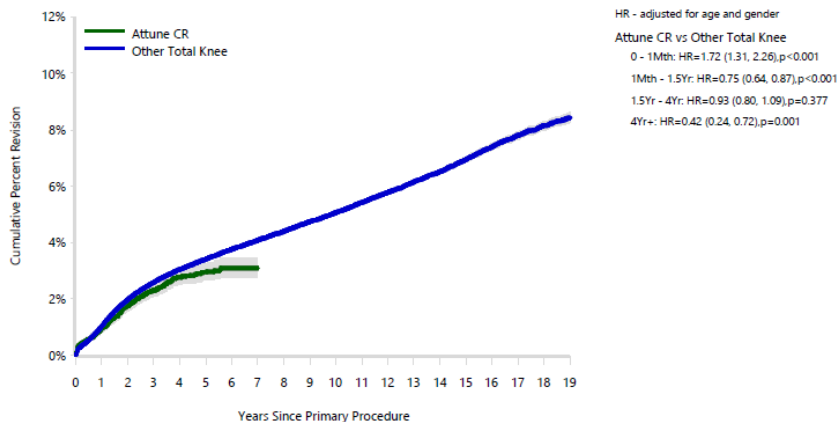
Reported by fixation: cemented or cementless

AIRS Reports

- More frequent
- More current

CR ATTUNE® KNEE IMPLANT SURVIVORSHIP

Figure 1: Cumulative Percent Revision of Primary Total Knee Replacement by Model (All Diagnoses)(AOANJRR 4MAY2021)¹



This report indicates that the 18,534 cemented CR ATTUNE® Knee cumulative percent revision of 3.1% (95% CI: 2.8, 3.4%) at six years is **performing significantly better** than all other TKA in the AOANJRR (HR 0.42 (0.24, 0.72), p=0.001).¹

All other TKA in this report had a six year estimated cumulative percent revision of 3.8% (3.7, 3.8).¹ The cumulative percent revision for the CR ATTUNE Knee is based on a sample size of 162 patients at seven years and 7 patients at eight years.¹

Expressed as implant survivorship at six years, the CR ATTUNE Knees have a 96.9% implant survivorship (97.2, 96.5), which is performing favorably to the overall class of knees of 96.2% (96.3, 96.2) implant survivorship.¹

Table 11: Yearly Cumulative Percent Revision of Primary Total Knee Replacement by Model (All Diagnoses) AOANJRR 4MAY2021)¹

Number at Risk	0 Yr	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	6 Yrs	7 Yrs	8 Yrs
Attune CR	18534	15937	12693	9529	6343	3651	1537	162	7
Other Total Knee	759381	701950	639879	576907	515144	455852	399362	345779	295627

CPR	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	6 Yrs	7 Yrs
Attune CR	0.9 (0.8, 1.1)	1.7 (1.6, 2.0)	2.3 (2.1, 2.6)	2.8 (2.5, 3.1)	2.9 (2.6, 3.3)	3.1 (2.8, 3.4)	3.1 (2.8, 3.4)
Other Total Knee	1.0 (1.0, 1.0)	2.0 (1.9, 2.0)	2.6 (2.5, 2.6)	3.0 (3.0, 3.1)	3.4 (3.4, 3.4)	3.8 (3.7, 3.8)	4.1 (4.0, 4.1)

1. Australian Orthopaedic Association National Joint Replacement Registry (AOANJRR), Automated Industry Report System (AIRS), ID No.4155 for DePuy Synthes, ATTUNE CR/ATTUNE Total Knee, (Procedures from 1 September 1999 – 4 May 2021), Accessed 6 May 2021, AOA, Adelaide: 1-17.

Disclaimer -AOANJRR is confident in the accuracy of the data included in this report, at the time it was provided. However, it was generated using an automated reporting system and has not been reviewed by the AOANJRR personnel.

CR ATTUNE KNEE TOP 5 REASONS FOR REVISION

Table 13: Yearly Cumulative Incidence Revision Diagnosis of Primary Total Knee Replacement by Model (All Diagnoses)

Model	Event	N Events	1 Yr	2 Yrs	3 Yrs	5 Yrs	10 Yrs	15 Yrs
Attune CR	Loosening	70	0.1 (0.0, 0.1)	0.2 (0.2, 0.3)	0.4 (0.3, 0.5)	0.6 (0.4, 0.7)		
	Infection	137	0.5 (0.4, 0.6)	0.7 (0.6, 0.8)	0.8 (0.7, 1.0)	0.9 (0.7, 1.0)		
	Instability	39	0.1 (0.0, 0.1)	0.1 (0.1, 0.2)	0.2 (0.1, 0.3)	0.3 (0.2, 0.5)		
	Patellofemoral Pain	25	0.0 (0.0, 0.1)	0.1 (0.1, 0.2)	0.1 (0.1, 0.2)	0.2 (0.1, 0.3)		
	Pain	38	0.0 (0.0, 0.1)	0.2 (0.1, 0.2)	0.2 (0.2, 0.3)	0.3 (0.2, 0.4)		
	Other	90	0.2 (0.1, 0.3)	0.4 (0.3, 0.5)	0.5 (0.4, 0.7)	0.7 (0.5, 0.8)		
	Deceased	502	0.4 (0.3, 0.5)	1.1 (1.0, 1.3)	2.2 (2.0, 2.5)	4.6 (4.2, 5.1)		
	All Revision	399	0.9 (0.8, 1.1)	1.7 (1.5, 1.9)	2.3 (2.0, 2.5)	2.9 (2.6, 3.2)		
Other Total Knee	Loosening	7540	0.2 (0.1, 0.2)	0.4 (0.4, 0.4)	0.5 (0.5, 0.6)	0.8 (0.7, 0.8)	1.2 (1.1, 1.2)	1.6 (1.6, 1.6)
	Infection	7397	0.4 (0.4, 0.5)	0.6 (0.6, 0.6)	0.7 (0.7, 0.8)	0.9 (0.9, 0.9)	1.1 (1.1, 1.1)	1.3 (1.2, 1.3)
	Instability	2681	0.1 (0.1, 0.1)	0.2 (0.2, 0.2)	0.2 (0.2, 0.2)	0.3 (0.3, 0.3)	0.4 (0.4, 0.4)	0.5 (0.5, 0.5)
	Patellofemoral Pain	2657	0.1 (0.1, 0.1)	0.2 (0.2, 0.2)	0.2 (0.2, 0.3)	0.3 (0.3, 0.3)	0.4 (0.4, 0.4)	0.5 (0.5, 0.5)
	Pain	2443	0.0 (0.0, 0.1)	0.1 (0.1, 0.2)	0.2 (0.2, 0.2)	0.3 (0.3, 0.3)	0.4 (0.4, 0.4)	0.5 (0.4, 0.5)
	Other	8104	0.2 (0.2, 0.2)	0.4 (0.4, 0.5)	0.6 (0.6, 0.6)	0.8 (0.8, 0.8)	1.2 (1.2, 1.3)	1.8 (1.7, 1.8)
	Deceased	13318	0.7 (0.7, 0.8)	1.7 (1.7, 1.8)	3.0 (3.0, 3.1)	6.5 (6.4, 6.6)	20.1 (20.0, 20.3)	38.4 (38.2, 38.6)
	All Revision	30822	1.0 (1.0, 1.0)	1.9 (1.9, 2.0)	2.5 (2.5, 2.6)	3.3 (3.3, 3.4)	4.8 (4.7, 4.8)	6.1 (6.0, 6.2)

Based on point estimates and confidence intervals, there is less incidence of revision for loosening with the CR ATTUNE Knee than all other Total Knee at 5 years follow-up.¹

The CR ATTUNE Knee is performing in line with the class for the remaining reasons for revision in this report.¹

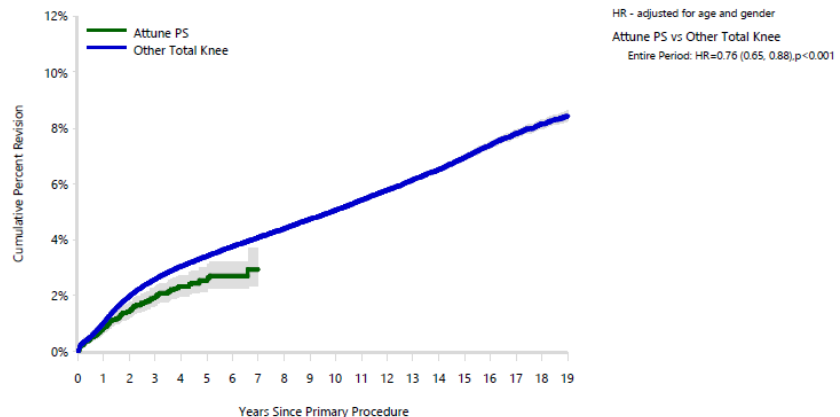
The cumulative percent revision for the CR ATTUNE Knee is based on a sample size of 162 patients at seven years and 7 patients at eight years.¹

1. Australian Orthopaedic Association National Joint Replacement Registry (AOANJRR), Automated Industry Report System (AIRS), ID No.4155 for DePuy Synthes, ATTUNE CR/ATTUNE Total Knee, (Procedures from 1 September 1999 – 4 May 2021), Accessed 6 May 2021, AOA, Adelaide: 1-17.

Disclaimer -AOANJRR is confident in the accuracy of the data included in this report, at the time it was provided. However, it was generated using an automated reporting system and has not been reviewed by the AOANJRR personnel.

PS ATTUNE KNEE IMPLANT SURVIVORSHIP

Figure 1: Cumulative Percent Revision of Primary Total Knee Replacement by Model (All Diagnoses)(AOANJRR 4MAY2021)²



Number at Risk	0 Yr	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	6 Yrs	7 Yrs	8 Yrs
Attune PS	9189	7513	5796	4297	2957	1808	894	226	11
Other Total Knee	768726	710374	646776	582139	518530	457695	400005	345715	295623

Table 11: Yearly Cumulative Percent Revision of Primary Total Knee Replacement by Model (All Diagnoses) AOANJRR 4MAY2021)²

CPR	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	6 Yrs	7 Yrs
Attune PS	0.8 (0.6, 1.0)	1.4 (1.2, 1.7)	1.9 (1.6, 2.2)	2.3 (2.0, 2.7)	2.5 (2.1, 3.0)	2.7 (2.3, 3.2)	2.9 (2.3, 3.7)
Other Total Knee	1.0 (1.0, 1.0)	2.0 (1.9, 2.0)	2.6 (2.5, 2.6)	3.0 (3.0, 3.1)	3.4 (3.4, 3.4)	3.8 (3.7, 3.8)	4.1 (4.0, 4.1)

2. Australian Orthopaedic Association National Joint Replacement Registry (AOANJRR), Automated Industry Report System (AIRS), ID No.4156 for DePuy Synthes, ATTUNE PS/ATTUNE Total Knee, (Procedures from 1 September 1999 – 4 May 2021), Accessed 6 May 2021, AOA, Adelaide: 1-17.

Disclaimer -AOANJRR is confident in the accuracy of the data included in this report, at the time it was provided. However, it was generated using an automated reporting system and has not been reviewed by the AOANJRR personnel.

This report indicates that the 9,189 cemented PS ATTUNE® Knee with a cumulative percent revision of 2.7% at six years (95% CI: 2.3, 3.2%) is **performing significantly better** than all other TKA in the AOANJRR (HR 0.76 (0.65, 0.88), p=0.001).²

All other TKA in this report had a six-year estimated cumulative percent revision of 3.8% (3.7, 3.8).² The seven-year cumulative percent revision for the PS ATTUNE Knee is based on a sample size of 226 patients and 11 patients at eight years.²

Expressed as implant survivorship at six years, the PS ATTUNE Knees have a 97.3% implant survivorship (97.7, 96.8), which is performing favorably to the overall class of knees of 96.2% (96.3, 96.2) implant survivorship.²

PS ATTUNE KNEE TOP 5 REASONS FOR REVISION

Table 13: Yearly Cumulative Incidence Revision Diagnosis of Primary Total Knee Replacement by Model (All Diagnoses)

Model	Event	N Events	1 Yr	2 Yrs	3 Yrs	5 Yrs	10 Yrs	15 Yrs
Attune PS	Loosening	34	0.1 (0.0, 0.2)	0.2 (0.1, 0.3)	0.4 (0.3, 0.6)	0.6 (0.4, 0.9)		
	Infection	68	0.4 (0.3, 0.6)	0.7 (0.5, 0.9)	0.8 (0.6, 1.0)	0.9 (0.7, 1.2)		
	Instability	18	0.1 (0.1, 0.2)	0.2 (0.1, 0.4)	0.2 (0.1, 0.4)	0.2 (0.1, 0.4)		
	Patellofemoral Pain	3	0.0 (0.0, 0.1)	0.0 (0.0, 0.1)	0.0 (0.0, 0.1)	0.0 (0.0, 0.1)		
	Pain	6	0.0 (0.0, 0.1)	0.0 (0.0, 0.1)	0.1 (0.0, 0.2)	0.1 (0.0, 0.2)		
	Other	33	0.1 (0.1, 0.3)	0.2 (0.2, 0.4)	0.3 (0.2, 0.5)	0.6 (0.4, 0.8)		
	Deceased	278	0.5 (0.4, 0.7)	1.4 (1.2, 1.7)	2.6 (2.2, 3.0)	5.2 (4.5, 5.9)		
	All Revision	162	0.8 (0.6, 1.0)	1.4 (1.2, 1.7)	1.9 (1.6, 2.2)	2.5 (2.1, 2.9)		
Other Total Knee	Loosening	7576	0.2 (0.1, 0.2)	0.4 (0.4, 0.4)	0.5 (0.5, 0.6)	0.8 (0.7, 0.8)	1.2 (1.1, 1.2)	1.6 (1.5, 1.6)
	Infection	7466	0.4 (0.4, 0.5)	0.6 (0.6, 0.6)	0.7 (0.7, 0.8)	0.9 (0.9, 0.9)	1.1 (1.1, 1.1)	1.3 (1.2, 1.3)
	Instability	2702	0.1 (0.1, 0.1)	0.2 (0.2, 0.2)	0.2 (0.2, 0.2)	0.3 (0.3, 0.3)	0.4 (0.4, 0.4)	0.5 (0.5, 0.5)
	Patellofemoral Pain	2679	0.1 (0.1, 0.1)	0.2 (0.2, 0.2)	0.2 (0.2, 0.3)	0.3 (0.3, 0.3)	0.4 (0.4, 0.4)	0.5 (0.5, 0.5)
	Pain	2475	0.0 (0.0, 0.1)	0.1 (0.1, 0.2)	0.2 (0.2, 0.2)	0.3 (0.3, 0.3)	0.4 (0.4, 0.4)	0.5 (0.4, 0.5)
	Other	8161	0.2 (0.2, 0.2)	0.4 (0.4, 0.5)	0.6 (0.6, 0.6)	0.8 (0.8, 0.8)	1.2 (1.2, 1.3)	1.8 (1.7, 1.8)
	Deceased	13341 3	0.7 (0.7, 0.7)	1.7 (1.7, 1.8)	3.0 (3.0, 3.1)	6.5 (6.4, 6.5)	20.1 (20.0, 20.2)	38.4 (38.2, 38.6)
	All Revision	31059	1.0 (1.0, 1.0)	1.9 (1.9, 2.0)	2.5 (2.5, 2.6)	3.3 (3.3, 3.4)	4.8 (4.7, 4.8)	6.1 (6.0, 6.2)

Based on point estimates and confidence intervals, the incidence of revision for loosening with the PS ATTUNE Knee is in line with the class of all other Total Knee at 5 years follow-up.²

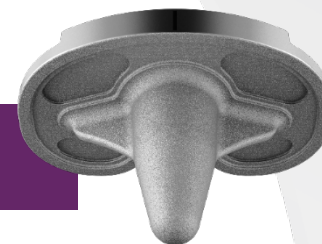
The PS ATTUNE Knee is performing in line with the class for the remaining reasons for revision in this report.²

The seven-year cumulative incidence rates for the PS ATTUNE Knee is based on a sample size of 226 patients.²

2. Australian Orthopaedic Association National Joint Replacement Registry (AOANJRR), Automated Industry Report System (AIRS), ID No.4156 for DePuy Synthes, ATTUNE PS/ATTUNE Total Knee, (Procedures from 1 September 1999 – 4 May 2021), Accessed 6 May 2021, AOA, Adelaide: 1-17.

ATTUNE S+™ TECHNOLOGY

DESIGNED TO PROVIDE ENHANCED FIXATION



UK NJR Implant Summary Report data reports 5,670 total primary TKAs performed using ATTUNE S+™ Technology and 3,305 reported at one-year follow-up showing a statistically significant improvement in survivorship compared to all other knees.¹

Extracted from Figure 1:
Cumulative Percent
Revision of Primary Total
Knee Replacement by Model

Period /years	At Risk	Attune CR and Attune PS (S+ tibial only)	All other Bicondylar knees in NJR
0	5670	-	-
1	3305	0.2% (0.1% - 0.3%)	0.4% (0.4% - 0.4%)
2	397	0.3% (0.1% - 0.6%)	1.0% (1.0% - 1.0%)

ATTUNE CR and ATTUNE PS (S+ tibial only) report:
Reasons for Revision

Reason for Revision	Revised †	Expected Revisions †	p value
Infection	7	12.72	0.121
Progressive Arthritis Remaining	0	0.61	1
Aseptic Loosening Femur	0	0.18	1
Aseptic Loosening Tibia	0	0.80	1
Aseptic Loosening Patella	0	0.23	1
Unexplained Pain	0	0.39	1
Stiffness	0	0.89	1
Malalignment	0	0.75	1
Instability	0	1.76	0.431
Dislocation / Subluxation	0	0.49	1
Periprosthetic Fracture	0	1.03	0.632
Wear of Polyethylene Component	0	0.11	1
Lysis - Tibia	0	0.15	1
Lysis - Femur	0	0.18	1
Component Dissociation	0	0.16	1
Implant Fracture	0	0.05	1
Other / Not recorded	3	1.18	0.117
Total Revised	10	19.62	0.031

† multiple reasons may be listed for one revision procedure

* Based on All NJR Bicondylar knees, adjusted for agegroup, gender, indications and implantation year

1. National Joint Registry for England, Wales, Northern Ireland and the Isle of Man. Implant Summary Report for DePuy ATTUNE CR and ATTUNE PS (S+ tibial only). NJR Database extract May 6, 2021, pages 1-26. Licensed for use until May 18, 2022. Available at www.ATTUNEvidence.com (US) and www.provingthepromise.com (EMEA).

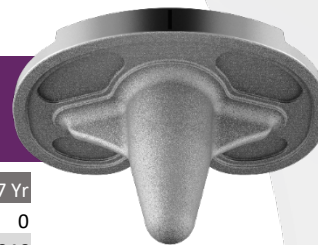
NJR Disclaimer: The data used for this analysis was obtained from the National Joint Registry ("NJR"). The Healthcare Quality Improvement Partnership ("HQIP"), the NJR and/or its contractor, Northgate Public Services (UK) Limited ("NPS") take no responsibility for the accuracy, currency, reliability and correctness of any data used or referred to in this report, nor for the accuracy, currency, reliability and correctness of links or references to other information sources and disclaims all warranties in relation to such data, links and references to the maximum extent permitted by legislation.

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



ATTUNE S+™ TECHNOLOGY

DESIGNED TO PROVIDE ENHANCED FIXATION



AOANJRR data reports 11,662 total primary TKAs performed using ATTUNE S+™ Technology and 3,523 reported at two-year follow-up showing a statistically significant improvement in survivorship compared to all other knees.¹

Extracted from Figure 1:
Cumulative Percent
Revision of Primary Total
Knee Replacement by Model

Number at Risk	0 Yr	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	6 Yr	7 Yr
Attune	11662	7649	3523	535	0	0	0	0
Other Total Knee	769970	712698	652569	589389	525125	462847	450572	348846

Extracted from Table 11:
Cumulative Percent
Revision of Primary Total
Knee Replacement

CPR	0 Yr	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	6 Yr	7 Yr
Attune		0.9 (0.7,1.1)	1.5 (1.2,1.8)	2.1 (1.7, 2.7)				
Other Total Knee		1.0 (1.0, 1.0)	2.0 (1.9, 2.0)	2.6 (2.5, 2.6)	3.0 (3.0, 3.1)	3.4 (3.4, 3.4)	3.8 (3.7, 3.8)	4.1 (4.0, 4.1)

Extracted from Table 12:
Revision Diagnosis of
Primary Total Knee
Replacement

Revision Diagnosis	Number	Attune		Other Total Knee		
		% Primaries Revised	% Revisions	Number	% Primaries Revised	% Revisions
Infection	62	0.5	44.0	5615	0.7	29.2
Loosening	15	0.1	10.6	4094	0.5	21.3
Patellofemoral Pain	4	0.0	2.8	1780	0.2	9.2
Instability	19	0.2	13.5	1723	0.2	9.0
Pain	13	0.1	9.2	1598	0.2	8.3
Patella Erosion	6	0.1	4.3	916	0.1	4.8
Arthrofibrosis	5	0.0	3.5	868	0.1	4.5
Fracture	5	0.0	3.5	542	0.1	2.8
Malalignment	2	0.0	1.4	468	0.1	2.4
Incorrect Sizing	2	0.0	1.4	271	0.0	1.4
Bearing Dislocation	1	0.0	0.7	151	0.0	0.8
Lysis				135	0.0	0.7
Wear Tibial Insert				106	0.0	0.6
Prosthesis Dislocation				67	0.0	0.3
Synovitis	1	0.0	0.7	66	0.0	0.3
Implant Breakage Patella				65	0.0	0.3
Implant Breakage Tibial Insert	1	0.0	0.7	60	0.0	0.3
Other	5	0.0	3.5	254	0.0	1.3
N Revision	141	1.2	100.0	19246	2.5	100.0
N Primary	11662			769970		

1. Australian Orthopaedic Association National Joint Replacement Registry (AOANJRR), Automated Industry Report System (AIRS), ID No. 4292 for DePuy Synthes, ATTUNE Total Knee, (Procedures from 1 September 1999 – 26 May 2021), Accessed 28 May 2021, AOA, Adelaide: 1-17.

Disclaimer -AOANJRR is confident in the accuracy of the data included in this report, at the time it was provided. However, it was generated using an automated reporting system and has not been reviewed by the AOANJRR personnel.

Please refer to the instructions for use for a complete list of indications, contraindications, warnings and precautions.

