



Detail Report for

Lima-Mathys - Physica ZUK (K1.2 Tibial Tray Including Monobloc)

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EPRD Detail Report for Physica ZUK (K1.2 Tibial Tray Including Monobloc)

Introduction

The following pages contain a summary of the data the EPRD (German Arthroplasty Registry) has collected for primary and revision procedures with specific components. This report consists of four parts, each of which consists of several tables and graphs. These four parts and their contents are outlined below.

Part I: Product Overview

The Product Overview lists all specific products considered in this report, sorted by product code, short text, trademark, and component type. It also states the number of primary procedures and revision procedures with these components currently in follow-up. These are listed separately for each product.

Part II: Primary Procedures and Cumulative Revision Rates

This section of the Data Overview compares primary procedures using at least one of the products listed in Product Overview A (as well as - if applicable - products listed in Overviews B, C, and D) to all other primary procedures of the same category. The EPRD distinguishes between the following distinct categories of primary procedures:

- Elective THA with uncemented stem
- Elective THA with cemented stem
- THA for Femoral Neck fracture (regardless of stem fixation)
- Hemiarthroplasty
- TKA, Standard
- TKA, constrained (= hinged or varus valgus stabilised PS systems)
- Unicondylar Knee Arthroplasty (UKA)
- Patellofemoral arthroplasty (PFA)

Please note that procedures which cannot be assigned to any of these categories - which is typically due to incomplete product classification - will be listed in the placeholder category "???". If implant components are used in different categories of procedures (e.g., a modular head which can be combined with a cemented stem or a cementless stem), results in the data overview are presented separately.

The cumulative revision rate is calculated using Kaplan-Meier estimators. For the overall comparison group, weighted estimators are used with weights representing the initial ratio of the category proportions for the procedures with the specified products (with weight 1 for the most frequent category). The EPRD defines a revision as every procedure in which at least one component is removed, exchanged or additionally implanted. Note that the component that is exchanged or removed is not necessarily amongst the products listed in the Product Overview.

For the calculation of the revision rate, any revision procedure is considered as an endpoint for the whole implant system. The data overview lists the corresponding 95% confidence limits in brackets behind the actual revision rate. In further brackets below the confidence limits, the number of procedures at risk for the specific time point is given. If any revision occurred in primary procedures with the aforementioned articles, the reasons for revisions and components exchanged during revision are listed separately.

The reasons for revisions are shown as absolute numbers and - in brackets beneath - as relative numbers. In many cases the EPRD only gets the information about a revision from clearance data of insurance companies, and in such cases the reason of revision often remains unknown. The components exchanged during revision are shown as absolute numbers.

For each of the main components of the primary procedure (i.e. stem, head, cup, liner for hip arthroplasty and femoral component, tibial component, insert and patellar component for knee arthroplasty) the following numbers are presented: The number of revision procedures in which a new component of a particular type has been newly implanted (possibly exchanging a formerly implanted one), the number of revision procedures in which the specific component remained untouched, and the number of revision procedures for which there are either no information on implanted components at all or for which unknown articles have been documented.

Part III: Revision Procedures and Cumulative Re-Revision Rates

This section compares revision procedures using the products listed in Part I to other revision procedures. Part III follows the same structure as the preceding part, and the cumulative re-revision rate is computed analogously to the cumulative revision rate in Part II using Kaplan-Meier-estimates. For this evaluation, the EPRD only differentiates between hip and knee revisions as well as aseptic and septic revisions. A revision is regarded as a septic revision if either an infection was recorded as reason for revision in the registry itself or the ICD code T84.5 was documented in the billing data for the hospital stay of the revision. The EPRD does not differentiate between 1st, 2nd, 3rd revision (and so on), since in most cases information about prior surgeries is not available.

Part IV: Cumulative Mortality Rates

In this section, figures regarding Patient Mortality are listed. In addition to the cumulative mortality rate, the absolute number of deaths during the follow-up period is also presented. Please note that the patient mortality presented here refers to mortality from all causes and that therefore the death of a patient - especially if it occurs several years after the procedure - is not necessarily related to their implant treatment.

EPRD Detail Report for Physica ZUK (K1.2 Tibial Tray Including Monobloc) Abbreviations

The data overviews use a number of abbreviations. These are listed and defined here, sorted by the part(s) of the report in which they appear.

Abbreviations used in the **Introduction** to this report:

Abbreviation	Meaning
THA	Total hip arthroplasty
TKA	Total knee arthroplasty
UKA	Unicondylar Knee Arthroplasty
PFA	Patellofemoral arthroplasty

Abbreviations used in the table **Data Overview for Primary Procedures** of **Part II: Primary Procedures and Cumulative Revision Rates**
as well as in the table **Data Overview for Revision Procedures** of **Part III: Revision Procedures and Cumulative Re-Revision Rates**:

Abbreviation	Meaning
Category	Type of procedure (e.g., unicondylar knee arthroplasty for primary procedures or aseptic hip revisions for revision procedures)
Procedures with ...	Procedures using at least one of the products listed in the product overview or procedures from the comparison group
n	Absolute number of procedures of this category / this subgroup in follow-up
%	Percentage of procedures in this subgroup
Age	The median age is presented. In addition, in brackets behind it the interquartile range (IQR) is given.
BMI	The median <i>Body Mass Index</i> is presented. In addition, in brackets behind it the interquartile range (IQR) is given.
%V	The percentage of valid BMI values. Listed as BMI information is not available for all procedures.
%Male	Percentage of male patients
#Centres	Number of centres in which the procedures were conducted
%OA	Percentage of the group with a diagnosis for osteoarthritis. For determination, each patient for whom the ICD code of the main diagnosis starts with M16 or M17 is counted.
#Rev	Number of revised procedures.
Follow-up in years	The median follow-up time in years and its interquartile range

Abbreviations used in the table **Components Exchanged During Revision** of **Part II: Primary Procedures and Cumulative Revision Rates**
as well as the table **Components used during Re-Revision** of **Part III: Revision Procedures and Cumulative Re-Revision Rates**:

Abbreviation	Meaning
EX	Number of revision procedures in which a new component of a particular type has been newly implanted, possibly exchanging a formerly implanted one.
UT	Number of revision procedures in which the specific component remained untouched
?	Number of revision procedures for which there are either no information on implanted components at all or for which unknown articles have been documented.

Product Number	Product Shorttext	Trademark	Component Type	No. of procedures	
				primary	revision
00-5842-001-01	UNI FL.FIX TIB PRC MLT/LRT SZ1	Physica ZUK	K1.2 Tibial Tray Including Monobloc	71	0
00-5842-001-02	UNI FL.FIX TIB PRC MRT/LLT SZ1	Physica ZUK	K1.2 Tibial Tray Including Monobloc	51	0
00-5842-002-01	UNI FL.FIX TIB PRC MLT/LRT SZ2	Physica ZUK	K1.2 Tibial Tray Including Monobloc	440	1
00-5842-002-02	UNI FL.FIX TIB PRC MRT/LLT SZ2	Physica ZUK	K1.2 Tibial Tray Including Monobloc	357	0
00-5842-003-01	UNI FL.FIX TIB PRC MLT/LRT SZ3	Physica ZUK	K1.2 Tibial Tray Including Monobloc	889	2
00-5842-003-02	UNI FL.FIX TIB PRC MRT/LLT SZ3	Physica ZUK	K1.2 Tibial Tray Including Monobloc	829	2
00-5842-004-01	UNI FL.FIX TIB PRC MLT/LRT SZ4	Physica ZUK	K1.2 Tibial Tray Including Monobloc	886	3
00-5842-004-02	UNI FL.FIX TIB PRC MRT/LLT SZ4	Physica ZUK	K1.2 Tibial Tray Including Monobloc	808	6
00-5842-005-01	UNI FL.FIX TIB PRC MLT/LRT SZ5	Physica ZUK	K1.2 Tibial Tray Including Monobloc	623	6
00-5842-005-02	UNI FL.FIX TIB PRC MRT/LLT SZ5	Physica ZUK	K1.2 Tibial Tray Including Monobloc	521	3
00-5842-006-01	UNI FL.FIX TIB PRC MLT/LRT SZ6	Physica ZUK	K1.2 Tibial Tray Including Monobloc	271	2
00-5842-006-02	UNI FL.FIX TIB PRC MLT/LLT SZ6	Physica ZUK	K1.2 Tibial Tray Including Monobloc	215	3

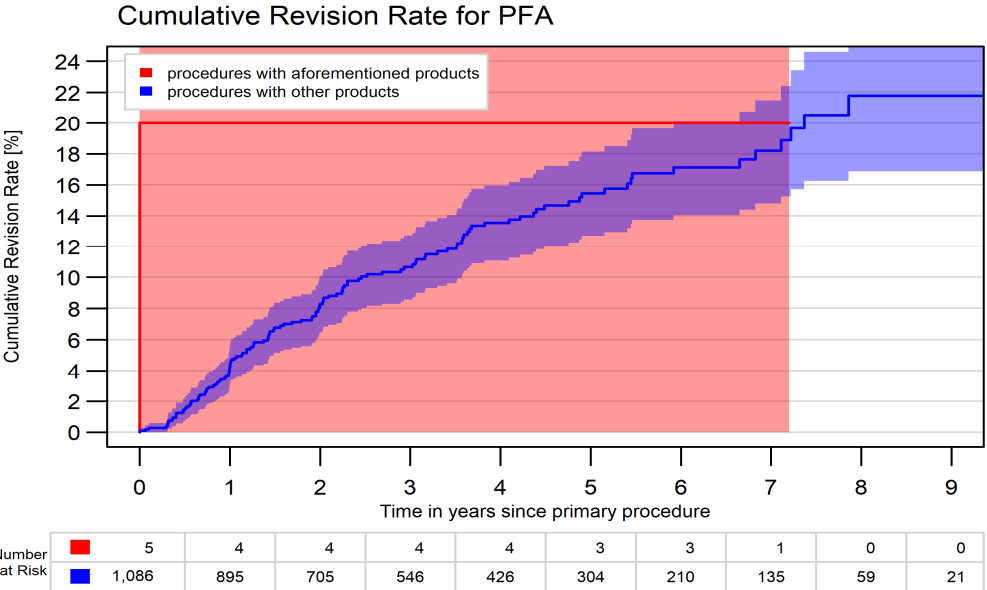
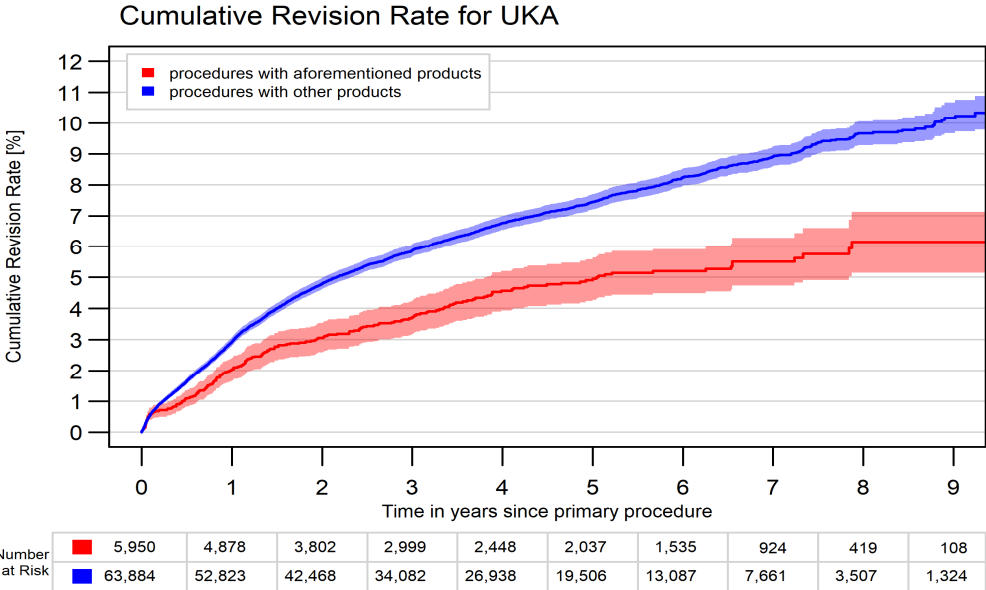
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Part II: Primary Procedures and Cumulative Revision Rates

Data Overview Primary Procedures													Follow-Up (years)		Procedures
Category	Procedures with ...	n	%	Age		%Male	BMI			#Centres	%OA	#Rev	Median	Range	from
				Median	Range		Median	Range	%V						
OVERALL	aforementioned products	5,958		64	[58; 72]	46.0	29.7	[26.7; 33.3]	79	135	99.0	230	3.0	[1.3, 6.1]	12/12-03/24
UKA	aforementioned products	5,950	8.5	64	[58; 72]	46.0	29.7	[26.7; 33.3]	79	135	99.0	228	3.0	[1.3, 6.1]	12/12-03/24
UKA	other products	63,884	91.5	63	[57; 72]	44.9	29.4	[26.4; 33.3]	76	679	98.7	3,850	3.3	[1.4, 5.5]	11/12-03/24
PFA	aforementioned products	5	0.5	61	[54; 63]	80.0	28.1	[27.5; 29.8]	80	3	100.0	1	6.5	[4.2, 6.5]	01/17-01/20
PFA	other products	1,086	99.5	55	[49; 62]	26.1	28.4	[24.8; 32.4]	78	242	81.6	129	3.0	[1.4, 5.3]	12/12-03/24
???	aforementioned products	3		63	[52; 71]	33.3	25.2	[25.2; 25.2]	33	2	100.0	1	7.1	[0.8, 8.4]	10/15-03/18

Cumulative Revision Rates										
Category	Procedures with ...	Cumulative Revision Rate in % after ...								
		1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	
OVERALL	aforementioned products	2.1 [1.7, 2.5]	3.1 [2.6, 3.6]	3.7 [3.2, 4.3]	4.6 [4.0, 5.2]	4.9 [4.3, 5.6]	5.2 [4.5, 5.9]	5.5 [4.8, 6.3]	6.2 [5.2, 7.2]	
		(4,884)	(3,808)	(3,005)	(2,454)	(2,042)	(1,540)	(927)	(420)	
OVERALL*	other products	2.9 [2.8, 3.1]	4.8 [4.6, 5.0]	5.9 [5.7, 6.1]	6.8 [6.5, 7.0]	7.5 [7.2, 7.7]	8.2 [8.0, 8.5]	8.9 [8.6, 9.2]	9.7 [9.3, 10.1]	
UKA	aforementioned products	2.0 [1.7, 2.4]	3.1 [2.6, 3.5]	3.7 [3.2, 4.3]	4.6 [3.9, 5.2]	4.9 [4.2, 5.6]	5.2 [4.5, 5.9]	5.5 [4.7, 6.3]	6.1 [5.1, 7.1]	
		(4,878)	(3,802)	(2,999)	(2,448)	(2,037)	(1,535)	(924)	(419)	
UKA	other products	2.9 [2.8, 3.1]	4.8 [4.6, 5.0]	5.9 [5.7, 6.1]	6.8 [6.5, 7.0]	7.5 [7.2, 7.7]	8.2 [8.0, 8.5]	8.9 [8.6, 9.2]	9.7 [9.3, 10.1]	
		(52,823)	(42,468)	(34,082)	(26,938)	(19,506)	(13,087)	(7,661)	(3,507)	
PFA	aforementioned products	20.0 [0.0, 48.4]	20.0 [0.0, 48.4]	20.0 [0.0, 48.4]	20.0 [0.0, 48.4]	20.0 [0.0, 48.4]	20.0 [0.0, 48.4]	20.0 [0.0, 48.4]	20.0 [0.0, 48.4]	
		(4)	(4)	(4)	(4)	(3)	(3)	(1)		
PFA	other products	4.4 [3.1, 5.7]	8.3 [6.5, 10.1]	10.7 [8.6, 12.7]	13.5 [11.1, 16.0]	15.5 [12.7, 18.1]	17.1 [14.0, 20.1]	18.2 [14.8, 21.5]	21.8 [16.9, 26.4]	
		(895)	(705)	(546)	(426)	(304)	(210)	(135)	(59)	
???	aforementioned products	33.3 [0.0, 70.0]	33.3 [0.0, 70.0]	33.3 [0.0, 70.0]	33.3 [0.0, 70.0]	33.3 [0.0, 70.0]	33.3 [0.0, 70.0]	33.3 [0.0, 70.0]	33.3 [0.0, 70.0]	
		(2)	(2)	(2)	(2)	(2)	(2)	(2)	(1)	

*: Cumulative Revision Rates for the overall comparison group are calculated using a weighted Kaplan-Meier estimator

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Part II: Primary Procedures and Cumulative Revision Rates



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Part II: Primary Procedures and Cumulative Revision Rates

<i>Reasons for Revision</i>			Dislocation /	Peripr.	Malposition /	Aseptic			
Category	Procedures with ...	Infection	Instability	Fracture	Malalignment	loosening	Wear	Other	Unknown
OVERALL	aforementioned products	35	0	0	2	48	2	65	57
		(16.7%)	(0.0%)	(0.0%)	(1.0%)	(23.0%)	(1.0%)	(31.1%)	(27.3%)
UKA	aforementioned products	35	0	0	2	48	2	65	55
		(16.9%)	(0.0%)	(0.0%)	(1.0%)	(23.2%)	(1.0%)	(31.4%)	(26.6%)
UKA	other products	280	0	0	73	940	60	1,228	977
		(7.9%)	(0.0%)	(0.0%)	(2.1%)	(26.4%)	(1.7%)	(34.5%)	(27.5%)
PFA	aforementioned products	0	0	0	0	0	0	0	1
		(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(100.0%)
PFA	other products	7	0	0	1	9	2	59	50
		(5.5%)	(0.0%)	(0.0%)	(0.8%)	(7.0%)	(1.6%)	(46.1%)	(39.1%)
???	aforementioned products	0	0	0	0	0	0	0	1
		(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(100.0%)

<i>Components exchanged during Revision</i>			Tibial Tray			Tibial Insert			Femoral Comp.			Patellar Comp.		
Category	Procedures with ...	#Rev	EX	UT	?	EX	UT	?	EX	UT	?	EX	UT	?
OVERALL	aforementioned products	230	122	42	66	160	5	65	127	38	65	12	141	77
UKA	aforementioned products	228	122	42	64	160	5	63	127	38	63	12	141	75
UKA	other products	3,850	2,324	621	905	2,926	33	891	2,278	670	902	265	2,518	1,067
PFA	aforementioned products	1	0	0	1	0	0	1	0	0	1	0	0	1
PFA	other products	129	77	14	38	77	14	38	78	13	38	31	56	42
???	aforementioned products	1	0	0	1	0	0	1	0	0	1	0	0	1

EPRD Detail Report for
Physica ZUK (K1.2 Tibial Tray Including Monobloc)
Part II: Primary Procedures and Cumulative Revision Rates

Specific Implant Combinations		Trademarks for ...			Number of Implantations
Category	Tibial Tray	Tibial Insert	Femoral Knee	Patellar Component	
1 UKA	Physica ZUK	Phsica ZUK	Physica ZUK		5,950
2 PFA	Physica ZUK	Phsica ZUK	<from another company>	<from another company>	4
3 ???	Physica ZUK	Phsica ZUK	Physica ZUK		3
4 PFA	Physica ZUK	Phsica ZUK	<from another company>		1
5					
6					
7					
8					
9					
10					
11					
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15					
16					
17					
18					
19					
20					

					Cumulative Revision Rates for specific Implant Combinations in % after ...													
Age	%Male	#Centres	#Rev		1 year		2 years		3 years		4 years		5 years		6 years		7 years	
1	64	46.0	135	228	2.0 [1.7, 2.4]	(4,878)	3.1 [2.6, 3.5]	(3,802)	3.7 [3.2, 4.3]	(2,999)	4.6 [3.9, 5.2]	(2,448)	4.9 [4.2, 5.6]	(2,037)	5.2 [4.5, 5.9]	(1,535)	5.5 [4.7, 6.3]	(924)
2	62	75.0	2	1	25.0 [0.0, 57.4]	(3)	25.0 [0.0, 57.4]	(3)	25.0 [0.0, 57.4]	(3)	25.0 [0.0, 57.4]	(3)	25.0 [0.0, 57.4]	(3)	25.0 [0.0, 57.4]	(3)	25.0 [0.0, 57.4]	(1)
3	63	33.3	2	1	33.3 [0.0, 70.0]	(2)	33.3 [0.0, 70.0]	(2)	33.3 [0.0, 70.0]	(2)	33.3 [0.0, 70.0]	(2)	33.3 [0.0, 70.0]	(2)	33.3 [0.0, 70.0]	(2)	33.3 [0.0, 70.0]	(2)
4	54	100.0	1	0	0	(1)	0	(1)	0	(1)	0	(1)						
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Part II: Primary Procedures and Cumulative Revision Rates

Reasons for Revision for specific Implant Combinations										
Category	Number of Implantations	#Rev	Infection	Recurrent dislocation	Fracture	Malposition / Malalignment	Aseptic loosening	Wear	Other	Unknown
1 UKA Physica ZUK, Physica ZUK, Physica ZUK	5,950	228	35 (16.9%)	0 (0.0%)	0 (0.0%)	2 (1.0%)	48 (23.2%)	2 (1.0%)	65 (31.4%)	55 (26.6%)
2 PFA Physica ZUK, Physica ZUK, <from another company>, <from another company>	4	1	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
3 ??? Physica ZUK, Physica ZUK, Physica ZUK	3	1	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
4 PFA Physica ZUK, Physica ZUK, <from another company>	1	0								
5										
6										
7										
8										
9										
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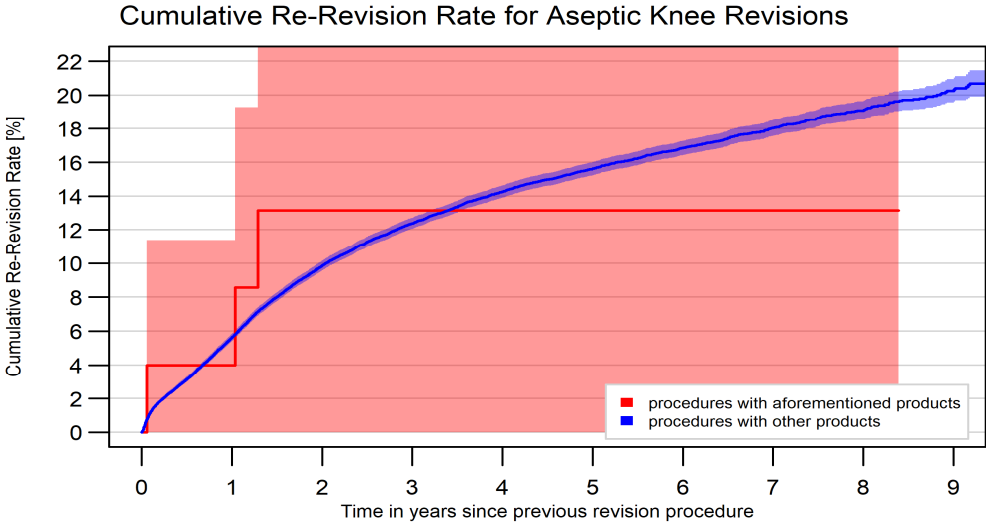
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Part III: Revision Procedures and Cumulative Re-Revision Rates

Data Overview Revision Procedures											Age		BMI				Follow-Up (years)		Procedures
Category	Procedures with ...	n	Median	Range	%Male	Median	Range	%V	#Centres	#Rev	Median	Range	from						
OVERALL	aforementioned products	28	59.5	[54; 66]	53.6	30.1	[26.2; 34.0]	64	11	4	4.4	[1.4, 7.7]	11/15-11/23						
Aseptic Knee Revisions	aforementioned products	26	60	[54; 66]	50.0	30.1	[26.2; 34.0]	69	11	3	3.7	[1.3, 7.4]	11/15-11/23						
Aseptic Knee Revisions	other products	48,341	70	[61; 77]	33.3	30.1	[26.7; 34.6]	75	750	6,112	3.1	[1.3, 5.5]	11/12-03/24						
Septic Knee Revisions	aforementioned products	2	53.5	[48; 59]	100.0			0	1	1	7.1	[5.8, 8.4]	11/15-04/16						
Septic Knee Revisions	other products	12,644	71	[63; 78]	47.2	30	[26.2; 34.7]	76	681	3,312	2.1	[0.6, 4.5]	12/12-03/24						

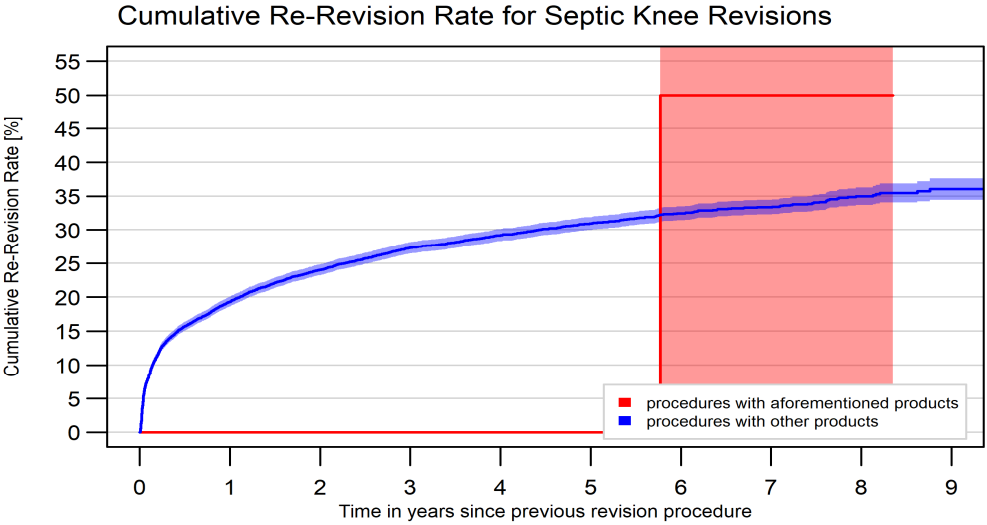
Cumulative Re-Revision Rates										
Category	Procedures with ...	Cumulative Re-Revision Rate in % after ...								
		1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	
OVERALL	aforementioned products	3.7 [0.0, 10.6]	12.1 [0.0, 24.0]	12.1 [0.0, 24.0]	12.1 [0.0, 24.0]	12.1 [0.0, 24.0]	20.1 [0.0, 37.0]	20.1 [0.0, 37.0]	20.1 [0.0, 37.0]	
		(23)	(18)	(16)	(15)	(12)	(10)	(8)	(7)	
OVERALL*	other products	5.9 [5.7, 6.1]	10.1 [9.9, 10.4]	12.7 [12.3, 13.0]	14.5 [14.2, 14.9]	15.9 [15.5, 16.3]	17.1 [16.7, 17.6]	18.3 [17.9, 18.8]	19.4 [18.9, 19.9]	
Aseptic Knee Revisions	aforementioned products	4.0 [0.0, 11.4]	13.1 [0.0, 26.0]	13.1 [0.0, 26.0]	13.1 [0.0, 26.0]	13.1 [0.0, 26.0]	13.1 [0.0, 26.0]	13.1 [0.0, 26.0]	13.1 [0.0, 26.0]	
		(21)	(16)	(14)	(13)	(10)	(9)	(7)	(6)	
Aseptic Knee Revisions	other products	5.6 [5.4, 5.9]	9.9 [9.6, 10.1]	12.4 [12.0, 12.7]	14.3 [13.9, 14.6]	15.6 [15.2, 16.0]	16.8 [16.4, 17.3]	18.0 [17.6, 18.5]	19.1 [18.6, 19.6]	
		(38,939)	(31,308)	(24,988)	(19,579)	(14,450)	(10,012)	(6,055)	(2,975)	
Septic Knee Revisions	aforementioned products	0.0	0.0	0.0	0.0	0.0	50.0 [0.0, 87.5]	50.0 [0.0, 87.5]	50.0 [0.0, 87.5]	
		(2)	(2)	(2)	(2)	(2)	(1)	(1)	(1)	
Septic Knee Revisions	other products	19.3 [18.6, 20.0]	24.0 [23.2, 24.8]	27.3 [26.4, 28.1]	29.2 [28.3, 30.1]	30.9 [30.0, 31.9]	32.4 [31.4, 33.5]	33.4 [32.3, 34.4]	35.0 [33.7, 36.3]	
		(8,378)	(6,484)	(4,973)	(3,774)	(2,678)	(1,728)	(1,029)	(482)	

*: Cumulative Re-Revision Rates for the overall comparison group are calculated using a weighted Kaplan-Meier estimator

EPRD Detail Report for
Physica ZUK (K1.2 Tibial Tray Including Monobloc)
Part III: Revision Procedures and Cumulative Re-Revision Rates



Number at Risk	<div></div>	26	21	16	14	13	10	9	7	6	0
	<div></div>	48,341	38,939	31,308	24,988	19,579	14,450	10,012	6,055	2,975	1,103



Number at Risk	<div></div>	2	2	2	2	2	2	1	1	1	0
	<div></div>	12,644	8,378	6,484	4,973	3,774	2,678	1,728	1,029	482	158

EPRD Detail Report for
Physica ZUK (K1.2 Tibial Tray Including Monobloc)
Part III: Revision Procedures and Cumulative Re-Revision Rates

<i>Reasons for Re-Revision</i>									
Category	Procedures with ...	Infection	Recurrent dislocation	Peripr. Fracture	Malposition / Malalignment	Aseptic loosening	Wear	Other	Unknown
OVERALL	aforementioned products	0 <i>(0.0%)</i>	0 <i>(0.0%)</i>	0 <i>(0.0%)</i>	0 <i>(0.0%)</i>	1 <i>(25.0%)</i>	0 <i>(0.0%)</i>	1 <i>(25.0%)</i>	2 <i>(50.0%)</i>
Aseptic Knee Revisions	aforementioned products	0 <i>(0.0%)</i>	0 <i>(0.0%)</i>	0 <i>(0.0%)</i>	0 <i>(0.0%)</i>	0 <i>(0.0%)</i>	0 <i>(0.0%)</i>	1 <i>(33.3%)</i>	2 <i>(66.7%)</i>
Aseptic Knee Revisions	other products	1,313 <i>(23.8%)</i>	0 <i>(0.0%)</i>	0 <i>(0.0%)</i>	95 <i>(1.7%)</i>	1,196 <i>(21.7%)</i>	126 <i>(2.3%)</i>	1,438 <i>(26.1%)</i>	1,340 <i>(24.3%)</i>
Septic Knee Revisions	aforementioned products	0 <i>(0.0%)</i>	0 <i>(0.0%)</i>	0 <i>(0.0%)</i>	0 <i>(0.0%)</i>	1 <i>(100.0%)</i>	0 <i>(0.0%)</i>	0 <i>(0.0%)</i>	0 <i>(0.0%)</i>
Septic Knee Revisions	other products	2,181 <i>(67.7%)</i>	0 <i>(0.0%)</i>	0 <i>(0.0%)</i>	11 <i>(0.3%)</i>	222 <i>(6.9%)</i>	21 <i>(0.7%)</i>	519 <i>(16.1%)</i>	267 <i>(8.3%)</i>

<i>Components exchanged during Re-Revision</i>			Tibial Tray			Tibial Insert			Femoral Comp.			Patellar Comp.		
Category	Procedures with ...	#Rev	EX	UT	?	EX	UT	?	EX	UT	?	EX	UT	?
OVERALL	aforementioned products	4	2	0	2	2	0	2	2	0	2	0	1	3
Aseptic Knee Revisions	aforementioned products	3	1	0	2	1	0	2	1	0	2	0	1	2
Aseptic Knee Revisions	other products	6,112	2,113	1,896	2,103	3,583	598	1,931	2,317	1,713	2,082	876	2,838	2,398
Septic Knee Revisions	aforementioned products	1	1	0	0	1	0	0	1	0	0	0	0	1
Septic Knee Revisions	other products	3,312	919	863	1,530	1,700	177	1,435	1,007	778	1,527	209	1,485	1,618

EPRD Detail Report for
Physica ZUK (K1.2 Tibial Tray Including Monobloc)
Part III: Revision Procedures and Cumulative Re-Revision Rates

Specific Implant Combinations		Trademarks for ...			Number of Implantations
Category	Tibial Tray	Tibial Insert	Femoral Knee	Patellar Component	
1 Aseptic Knee Revisions	Physica ZUK	Phsica ZUK			14
2 Aseptic Knee Revisions	Physica ZUK	Phsica ZUK	Physica ZUK		12
3 Septic Knee Revisions	Physica ZUK	Phsica ZUK	Physica ZUK		2
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Cumulative Re-Revision Rates for specific Implant Combinations in % after ...																
Age	%Male	#Centres	#Rev	1 year	2 years	3 years	4 years	5 years	6 years	7 years						
1	60.5	42.9	6	3	7.1 [0.0, 19.7]	(11)	24.0 [0.0, 44.5]	(8)	24.0 [0.0, 44.5]	(7)	24.0 [0.0, 44.5]	(6)	24.0 [0.0, 44.5]	(4)	24.0 [0.0, 44.5]	(3)
2	57	58.3	7	0	0	(10)	0	(8)	0	(7)	0	(7)	0	(6)	0	(5)
3	53.5	100.0	1	1	0	(2)	0	(2)	0	(2)	0	(2)	0	(2)	50.0 [0.0, 87.5]	(1)
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
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16																
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20																

(row numbers refer to the row numbers of the table above)

EPRD Detail Report for
Physica ZUK (K1.2 Tibial Tray Including Monobloc)
Part IV: Cumulative Mortality Rates

Cumulative Mortality Rates for Primary Procedures		Cumulative Mortality Rate in % after ...							#Deaths
Category	Procedures with ...	1 year	2 years	3 years	4 years	5 years	6 years	7 years	
OVERALL	aforementioned products	0.5 [0.3, 0.7] (4,985)	1.4 [1.1, 1.7] (3,928)	2.3 [1.9, 2.8] (3,120)	3.3 [2.7, 3.9] (2,572)	5.0 [4.2, 5.7] (2,151)	6.8 [5.8, 7.7] (1,615)	8.8 [7.6, 9.9] (978)	258
UKA	aforementioned products	0.5 [0.3, 0.7] (4,977)	1.4 [1.1, 1.7] (3,920)	2.3 [1.9, 2.8] (3,112)	3.3 [2.7, 3.9] (2,564)	5.0 [4.2, 5.8] (2,144)	6.8 [5.8, 7.7] (1,608)	8.8 [7.6, 10.0] (975)	258
UKA	other products	0.4 [0.4, 0.5] (54,428)	1.0 [1.0, 1.1] (44,622)	2.0 [1.8, 2.1] (36,258)	3.0 [2.8, 3.2] (28,935)	4.4 [4.2, 4.6] (21,110)	6.0 [5.7, 6.3] (14,330)	7.9 [7.5, 8.2] (8,474)	2,385
PFA	aforementioned products	0.0 (5)	0.0 (5)	0.0 (5)	0.0 (5)	0.0 (4)	0.0 (4)	0.0 (1)	0
PFA	other products	0.4 [0.0, 0.8] (937)	0.6 [0.1, 1.2] (774)	0.9 [0.3, 1.6] (621)	1.3 [0.5, 2.1] (499)	3.1 [1.6, 4.6] (366)	3.7 [2.0, 5.4] (270)	4.6 [2.5, 6.7] (178)	27
???	aforementioned products	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (2)	0

Cumulative Mortality Rates for Revision Procedures		Cumulative Mortality Rate in % after ...							#Deaths
Category	Procedures with ...	1 year	2 years	3 years	4 years	5 years	6 years	7 years	
OVERALL	aforementioned products	0.0 (26)	0.0 (23)	0.0 (20)	0.0 (18)	0.0 (14)	0.0 (12)	0.0 (9)	0
Aseptic Knee Revisions	aforementioned products	0.0 (24)	0.0 (21)	0.0 (18)	0.0 (16)	0.0 (12)	0.0 (10)	0.0 (7)	0
Aseptic Knee Revisions	other products	2.2 [2.0, 2.3] (41,309)	4.1 [3.9, 4.3] (34,842)	6.2 [6.0, 6.5] (28,687)	8.8 [8.5, 9.1] (23,004)	11.7 [11.3, 12.1] (17,355)	14.9 [14.5, 15.4] (12,301)	18.5 [17.9, 19.0] (7,639)	5,239
Septic Knee Revisions	aforementioned products	0.0 (2)	0.0 (2)	0.0 (2)	0.0 (2)	0.0 (2)	0.0 (2)	0.0 (2)	0
Septic Knee Revisions	other products	6.3 [5.9, 6.7] (10,385)	10.0 [9.5, 10.6] (8,560)	14.5 [13.8, 15.1] (6,909)	18.9 [18.1, 19.7] (5,420)	23.3 [22.4, 24.2] (4,001)	28.4 [27.4, 29.5] (2,706)	32.8 [31.5, 34.0] (1,661)	2,640