

# Patient information

## Hip joint replacement



Hip stem prostheses (cementless and cemented)  
Hip cup systems (cementless and cemented)

Dear Patient,

You recently received an implant from the company implantcast GmbH. Below you will find some information regarding your implant. You can find more information in the patient section on our homepage: <https://www.implantcast.de/en/for-patients/>

### Possible risks, complications and service life

The materials used in implants are not as durable as natural bone structures and joints. They have a limited service life. The service life of an implant generally depends on multiple factors that can either shorten or extend its service life. In particular, body weight and heavy mechanical demands on the affected extremity, for example due to accidents, falls, sports or strenuous activities, will have negative effects. In addition, the use of devices with electric drive motors represents an increased risk of injury. After an overload of this kind, implants can break or fail in some other way. Smooth exertions, such as when cycling or swimming, are recommended. For a good chance of having a long-lived prosthesis, it is important to avoid all kinds of overload. This can require substantial changes in your lifestyle.

#### Factors associated with an increased likelihood of failure are:

- Excessive strain on the joint due to strenuous manual labor and/or unsuitable physical activities
- Severe deformities that interfere with the anchoring or with the exact positioning or function of the implant
- Therapies that degrade bone quality
- Muscular insufficiency
- Neuromuscular diseases in the affected extremity
- States which interfere with the patient's ability or willingness to follow the physician's instructions, especially during the healing phase
- Obesity
- Nicotine and/or drug abuse
- Alcoholism
- Prior surgeries on the affected extremity
- Diabetes
- Psoriasis
- Intra-articular injection of corticosteroids
- Condition after an infection

Following the implantation, further invasive surgical intervention may become necessary, such as the replacement of individual components or even the entire endoprosthesis. This depends on the specific reason for the revision.

As with any medical application, negative side effects and complications may occur with the implantation of a joint replacement. All types of endoprosthesis can fail for a number of reasons, including accidents, infections, aseptic loosening, dislocation of components, or wear.

As the wearer of a prosthesis, you should seek early treatment for all infections (e.g. of the teeth or urinary tract). By using follow-up examinations as they are offered, you can detect potential complica-

tions at an early stage. Inform your physician immediately of any unusual changes in the area of the surgery.

Under normal conditions of use, the following survival rates\* in % [95% CI]\*\* (service life) can be expected for **primary elective hip replacement**.

Years	cementless treatment	cemented treatment
1	97.3 % [97.2; 97.4]	97.7 % [97.6; 97.8]
2	96.9 % [96.8; 96.9]	97.4 % [97.3; 97.5]
3	96.6 % [96.5; 96.7]	97.1 % [97.0; 97.3]
4	96.4 % [96.3; 96.5]	96.9 % [96.7; 97.0]
5	96.3 % [96.2; 96.3]	96.7 % [96.5; 96.8]
6	96.1 % [96.0; 96.2]	96.4 % [96.1; 96.7]

Under normal conditions of use, the following survival rates\*\* in % [95% CI]\*\* (service life) can be expected for **revision hip replacement surgery (first revision)**.

Years	Low-friction pairing	cementless	cemented	hybrid (cementless cup + cemented stem)	reverse hybrid (cemented cup + cementless stem)
1	MoP	94.61 % [93.91; 95.23]	93.92 % [93.35; 94.45]	93.36 % [92.43; 94.18]	94.12 % [91.59; 95.90]
	CoP	93.93 % [92.80; 94.88]	94.04 % [92.12; 95.51]	93.17 % [91.55; 94.49]	Not applicable
	CoC	94.51 % [93.73; 95.20]	Not applicable	94.03 % [91.89; 95.62]	Not applicable
3	MoP	90.11 % [89.15; 90.98]	90.64 % [89.92; 91.31]	89.77 % [88.59; 90.83]	90.79 % [87.67; 93.15]
	CoP	89.10 % [87.58; 90.45]	88.81 % [86.16; 90.98]	89.08 % [86.94; 90.88]	Not applicable
	CoC	90.28 % [89.25; 91.22]	Not applicable	89.31 % [86.53; 91.55]	Not applicable
5	MoP	88.63 % [87.58; 89.60]	88.79 % [87.96; 89.57]	87.68 % [86.32; 88.91]	90.02 % [86.7; 92.55]
	CoP	87.34 % [85.63; 88.85]	86.01 % [82.88; 85.60]	85.88 % [83.13; 88.21]	Not applicable
	CoC	87.85 % [86.67; 88.93]	Not applicable	87.86 % [84.86; 90.31]	Not applicable
7	MoP	86.05 % [84.76; 87.25]	86.96 % [85.98; 87.88]	86.20 % [84.65; 87.60]	87.06 % [82.68; 90.40]
	CoP	86.42 % [84.55; 88.07]	84.80 % [81.36; 87.65]	84.86 % [81.71; 87.50]	Not applicable
	CoC	86.06 % [84.73; 87.28]	Not applicable	85.07 % [81.39; 88.08]	Not applicable
10	MoP	84.18 % [82.55; 85.68]	84.35 % [83.03; 85.57]	84.31 % [82.34; 86.08]	83.48 % [76.17; 88.72]
	CoP	84.43 % [81.92; 86.61]	81.47 % [76.56; 85.45]	84.86 % [81.71; 87.50]	Not applicable
	CoC	83.95 % [82.29; 85.47]	Not applicable	81.91 % [76.92; 85.91]	Not applicable

MoP: Metal on polyethylene, CoP: Ceramic on polyethylene, CoC: Ceramic on ceramic  
*Italics indicate that at these points in time, fewer than 250 cases were at risk.*

\* The survival rates are based on the revision rate data from the 2021 annual report of the Endoprothesenregister Deutschland (EPRD) (German Arthroplasty Registry).

\*\* The survival rates are based on the revision rate data from the 2021 annual report of the National Joint Registry for England, Wales, Northern Ireland and the Isle of Man (NJR).

\*\*\*95% CI: A 95% confidence interval (CI) means that there is a 95% probability that the survival rate lies within the specified range.

## Information regarding medical tests

Before undergoing a magnetic resonance imaging (MRI) scan, for example, or any other medical tests, inform your physician about your endoprosthesis. Your replacement joint has not been assessed for its safety and compatibility in an MRI environment. Its safety in an MRI environment is unknown. Therefore, it is not possible to rule out injuries from MRI scans.

One or more components of this product contain(s) the following CMR substance(s) classified as category 1A and/or 1B, and/or substances with endocrine-damaging properties in a concentration of more than 0.1 percent (weight by weight):

→ Cobalt; CAS no. 7440-48-4; EC no. 231-158-0

According to current scientific literature, medical devices made from cobalt alloys or stainless steel alloys containing cobalt do not cause an increased risk of cancer or deleterious effects on reproductive ability.

This product contains the following material or substance that could cause sensitivity or an allergic reaction in the patient:

→ Nickel; CAS no. 7440-02-0; EC no. 231-111-4

## Information about the implant card

Refer to your implant card for information that identifies all the components used in your endoprosthesis as well as each of the materials used. Always carry your implant card with you. It may be very helpful in case of any joint injuries or complications. You must also present this card at some security checkpoints, for example in airports.

For more information on each of the materials used, visit our homepage at the following link:

[www.implantcast.de/en/company/technology/](http://www.implantcast.de/en/company/technology/)

The symbols used on your implant card are explained below:

 Patient name	 Manufacturer
 Medical device	 Lot designation
 Outpatient clinic or physician	 Serial number
 Date	 Unique product identifier
 Internet page with patient information	 Product and manufacturer identification according to HRI format
 Material	 Catalog number
 Sales partner	

Best wishes from implantcast.

