

### **KEEP THIS LEAFLET**

You may need to read it again. If you have any further questions, ask your surgeon. If you experience any side effect, including **side effects not listed** in this leaflet. Talk to your doctor or pharmacist. See page 7.

This leaflet has been written assuming the person receiving the implants will read it.

### **REPORTING ADVERSE EVENTS**

Any incident in relation to the device shall be reported to your surgeon, healthcare facilities or family doctor.

PL-EU-EN-001.04 – 2024.06.13



AMPLITUDE

11 cours Jacques Offenbach - ZA Mozart 2 - 26000 VALENCE – France

<https://implantcard.amplitude-ortho.com>



# IMPLANTS

For Total Hip Replacement

## IMPORTANT PATIENT LEAFLET



**READ CAREFULLY THIS LEAFLET BEFORE SURGERY.  
IT CONTAINS IMPORTANT INFORMATION FOR YOU.**

### **WHAT IS IN THIS LEAFLET**

	<b>Pages</b>
<b>Intended use of the devices</b>	2
Devices expected lifetime	2
Contraindications	2
<b>Materials of the devices</b>	3
<b>Devices description</b>	4-5
<b>Warnings and precautions</b>	6-7
<b>Possible side effects</b>	7
<b>Reporting adverse events</b>	8



## INTENDED USE

**The hip implant system is intended to replace the natural hip joint (total or hemi hip arthroplasty) through an artificial system.**

Patients with a mature skeleton may be implanted with a total/partial hip prosthesis in cases of severe joint pathology (cartilage wear, inflammation like arthritis or after an injury such as a bone fracture after a fall) and where other devices or treatments have failed.

Please ask your surgeon for details. The decision to implant a total/partial hip prosthesis is left to the surgeon after evaluation of the risk/benefit balance and after discussion with you.

## DEVICES EXPECTED LIFETIME

The expected survivorships for the following hip implant systems are at least at 10 years:

- 95% for primary total hip replacement with a standard stem,
- 88% for primary total hip replacement with a lateralized stem,
- 84% for revision total hip replacement with a standard stem,
- 94% for hemiarthroplasty.

It can be reduced or extended depending on your activity level or events that could compromise implants integrity (falls, accidents...).

**Please attend regular check-ups according to your surgeon's advice.**

## CONTRAINDICATIONS

At the time of the surgery, these conditions are not recommended:

- Pregnancy and breastfeeding;
- Allergy to the implants materials;
- Infections;
- Severe mental, muscular, neurological or vascular deficiencies affecting the limb in question;
- Destruction of bone or poor bone quality which may affect the stability of the implant.

**These conditions should be discussed with your surgeon. Any pathology (even if not listed above) must be mentioned to your surgeon beforehand as well.**

## POSSIBLE SIDE EFFECTS

You must be informed about the side effects in relation with the device that might occur. Those recorded by Amplitude are rare (inferior to 1 for 1,000 cases). The following devices: EVOK recorded occasional side effects (between 1 for 1,000 cases and 1 for 100\* cases).

**Please consult your surgeon if any doubt.**

- Difficult recovery after major surgery;
- Infection;
- Pain;
- Allergy to implanted materials;
- Bone degeneration\*;
- Premature wear on joint surfaces ;
- Bone fracture;
- Prosthesis dislocation, displacement or loosening;
- Premature wear on joint surfaces;
- Prosthesis breakage;
- Conflict between the components of the prosthesis;
- Friction/conflict between the prosthesis and the surrounding tissue
- Noise from the prosthesis;
- Tissue reactions to prosthetic debris and wear particles;
- Uneven legs length\*;
- Neurovascular disorders;

Other events linked to the surgery or current knowledge can also occur:

- Phlebitis, fat or pulmonary embolism;
- Bruises;
- Bone ossification abnormalities ;
- Poor bone healing.
- Serious/ fatal complication of orthopaedic surgery, involving bone cement

**You must also be aware of the risks and possible side effects of surgery - please ask your surgeon for further information.**

After a joint replacement, you should pay attention during your daily life: any blow, fall or accident may **jeopardise your recovery or your implant lifetime**. Please ask your surgeon for further information.

## WARNINGS AND PRECAUTIONS

You must be informed about the factors that could compromise the success of the surgery and post operative results:


- Overweight; weight gain after surgery (especially for stems with weight restrictions);
- Case history detailing infections and/or falls;
- Metabolic disorders that reduce your resistance or induce progressive bone deterioration;
- Local bone tumours;
- Severe bone deformities;
- Severe osteoporosis;
- Addictive behaviour;
- Playing sports intensively;
- Playing risky sports or engaging in risky activities.

# SPECIFIC WARNINGS & MRI INFORMATION

**The materials used in your implant may trigger security gates/scanners.  
PLEASE INFORM PERSONNEL ABOUT YOUR IMPLANTED DEVICE.**

Non-clinical testing demonstrated that the implants are **MR Conditional**. A patient with one of these devices can be scanned safely in a MR system under the following conditions:

- Static magnetic field of 3T for a 15min-procedure.
- Maximum spatial gradient field of 1.500Gauss/cm.
- Normal operation mode only;
- The image artefact caused by the implants extends approximately 118.5mm from these implants. MR images may be blurred next to the implants.

 <b>MAXIMUM MEASURED TEMPERATURE RISE</b> with 3T MRI, for a 15min procedure	
EVOK stems - cementless	9.2°C (calorimetry WB-SAR of 4.71 W/kg)
F.A.I.R. stems—cementless	8.1°C (calorimetry WB-SAR of 4.08 W/kg)
All other implants	5.7°C (calorimetry WB-SAR of 2.06 W/kg)

<b>Specific weight restrictions for the</b>	
<b>Modular necks in association with OPTIMAL modular stems</b>	
<b>High L/M Neck</b>	<b>Lateralized Neck Version</b> Maximum patient weight: <b>90 kg</b>
<b>L/M+10.5 Neck</b>	<b>Lateralized and Medialized Neck Versions</b> Maximum patient weight: <b>90 kg</b>

<b>Specific weight restrictions:</b>		
<b>INITIALE stem</b> Dysplastic	<b>Size 121D</b> Maximum patient weight: <b>72 kg</b>	
<b>ACOR monobloc stem</b> Lateralized	<b>Size 1</b> Maximum patient weight: <b>60 kg</b>	
<b>EVOK stem</b> Standard	<b>Size 7</b> Maximum patient weight: <b>68 kg</b>	<b>Size 8</b> Maximum patient weight: <b>85 kg</b>
<b>EVOK stem</b> Lateralized	<b>Size 8</b> Maximum patient weight: <b>64 kg</b>	<b>Size 9</b> Maximum patient weight: <b>89 kg</b>

# MATERIALS COMPOSITIONS AND DISTRIBUTIONS FOR HIP IMPLANTS

Mass-to-mass ratio %	
<p><b>Stainless steel</b> C: ≤ 0.08% / Si: ≤0.75% / Mn: 2.00% - 4.25% / Ni: 9.00% - 11.00% / Cr: 19.50% - 22.00% / Mo: 2.00% - 3.00% / Nb: 0.25% - 0.80% / S ≤0.01% / P: ≤0.025% / Cu: ≤0.25% / N: 0.25% - 0.50% / Fe: Balance</p>	<p>SATURNE tripolar cup - <b>Cementless</b> SATURNE II dual mobility cup - <b>Cementless</b></p>
<p><b>Hydroxyapatite coating &amp; titanium undercoating</b> Ca<sub>5</sub>(PO<sub>4</sub>)<sub>3</sub>OH: 100% &amp; C: ≤ 0.1% / H: ≤ 0.3% / Fe: ≤ 0.6% / N: ≤ 5,0% / O: ≤10.0% / Ti: Balance</p>	<p>SATURNE tripolar cup - <b>Cemented</b> E<sup>2</sup> stem - <b>Cemented</b> ACOR monobloc stem - <b>Cemented</b> EVOK stem - <b>Cemented</b> INITIALE and INITIALE revision stem - <b>Cemented</b> GENERIC and GENERIC revision stems - <b>Cemented</b> SPHERIC bipolar cup Stainless Steel femoral head</p>
<p><b>Stainless steel</b> C: ≤ 0.08% / Si: ≤0.75% / Mn: 2.00% - 4.25% / Ni: 9.00% - 11.00% / Cr: 19.50% - 22.00% / Mo: 2.00% - 3.00% / Nb: 0.25% - 0.80% / S ≤0.01% / P: ≤0.025% / Cu: ≤0.25% / N: 0.25% - 0.50% / Fe: Balance</p>	<p>Ceramic femoral head Ceramic revision femoral head HORIZON II liner</p>
<p><b>BIOLOX<sup>®</sup> Delta ceramic</b> Al<sub>2</sub>O<sub>3</sub>: 60.00 - 90.00% / ZrO<sub>2</sub> + HfO<sub>2</sub>: 10.00 - 30.00% / HfO<sub>2</sub> in ZrO<sub>2</sub>: ≤5.00% Intended additives: ≤10.0% Total amount of impurities ≤0.2%</p>	<p>Cobalt-Chromium femoral head</p>
<p><b>Cobalt-Chromium alloy</b> Cr: 26.00% - 30.00% / Mo: 5.00% - 7.00% / Fe: ≤0.75% / Mn: ≤1.00% / C: ≤0.14% / Ni: ≤1.00% / N: ≤ 0.25% / Co: Balance</p>	<p>AUSTRAL liner</p>
<p><b>Highly cross-linked Polyethylene</b> PE: 100% Possible traces of Ti, Ca, Cl, Al.</p>	<p>HORIZON II cup with holes - <b>Cementless</b> HORIZON II cup without holes - <b>Cementless</b></p>
<p><b>Titanium alloy</b> Al: 5.50% - 6.75% / Va: 3.50% - 4.50% / Fe: ≤0.30% / O: ≤0.20% / C: ≤0.08% / N: ≤0.05% / H: ≤0.015% / Ti: Balance</p>	<p>AUSTRAL cup - <b>Cementless</b></p>
<p><b>Hydroxyapatite coating &amp; titanium undercoating</b> Ca<sub>5</sub>(PO<sub>4</sub>)<sub>3</sub>OH: 100% &amp; C: ≤ 0.1% / H: ≤ 0.3% / Fe: ≤ 0.6% / N: ≤ 5,0% / O: ≤10.0% / Ti: Balance</p>	<p>EVOK stem - <b>Cementless</b> F.A.I.R. stem - <b>Cementless</b> ACOR monobloc stem - <b>Cementless</b> INTEGRALE and stem - <b>Cementless</b> INTEGRALE revision stem - <b>Cementless</b> OPTIMAL stem - <b>Cementless</b></p>
<p><b>Titanium alloy</b> Al: 5.50% - 6.75% / Va: 3.50% - 4.50% / Fe: ≤0.3% / O: ≤0.20% / C: ≤0.08% / N: ≤0.05% / H: ≤0.015% / Ti: Balance</p>	<p>Sleeve (used with Ceramic revision femoral head) Modular neck</p>
<p><b>Unalloyed titanium porous coating</b> O: ≤0.40% / Fe: ≤ 0.50% / C: ≤ 0.08% / H: ≤ 0.05% / N: ≤ 0.05% / Ti: Balance</p>	<p>SATURNE liner for tripolar cup</p>
<p><b>Titanium alloy</b> Al: 5.50% - 6.75% / Va: 3.50% - 4.50% / Fe: ≤0.30% / O: ≤0.20% / C: ≤0.08% / N: ≤0.05% / H: ≤0.015% / Ti: Balance</p>	
<p><b>Hydroxyapatite coating</b> Ca<sub>5</sub>(PO<sub>4</sub>)<sub>3</sub>OH: 100%</p>	
<p><b>Titanium alloy</b> Al: 5.50% - 6.75% / Va: 3.50% - 4.50% / Fe: ≤0.30% / O: ≤0.20% / C: ≤0.08% / N: ≤0.05% / H: ≤0.015% / Ti: Balance</p>	
<p><b>Polyethylene</b> PE: 100% Possible traces of Ti, Ca, Cl, Al.</p>	



# YOU HAVE BEEN IMPLANTED WITH :

The surgeon needs to tick the boxes corresponding to the devices you have been implanted with.

Associations with other devices have to be validated by Amplitude.

## ACETABULAR COMPONENTS

### HORIZON II CUPS & LINERS RANGE

- HORIZON II cup (with holes) - **Cementless**
- HORIZON II liner to be inserted
  
- HORIZON II cup (without holes) with preassembled ceramic insert - **Cementless**



### SATURNE CUPS & LINERS RANGE

- SATURNE tripolar cup - **Cementless**
- SATURNE II dual mobility cup - **Cementless**
- SATURNE tripolar cup - **Cemented**
- SATURNE liner for tripolar cup to be inserted



### AUSTRAL CUPS & LINERS RANGE

- AUSTRAL or C2 cup - **Cementless**
- AUSTRAL or C2 liner to be inserted



### SPHERIC RANGE

- SPHERIC bipolar cup



## FEMORAL COMPONENTS

### FEMORAL HEADS RANGE

- BIOLOX<sup>®</sup> Delta Femoral head
- Metal (Stainless steel) Femoral head
- Metal (Cobalt-Chromium) Femoral head
  
- BIOLOX<sup>®</sup> Delta Revision Femoral head with sleeve



### FEMORAL STEMS RANGES

- INTEGRALE femoral stem - **Cementless**
- GENERIC femoral stem - **Cemented**
- INITIALE femoral stem - **Cemented**
- INITIALE dysplastic femoral stem - **Cemented**
- E<sup>2</sup> femoral stem - **Cemented**
  
- ACOR anatomic monobloc stem **standard** - **Cementless**
- ACOR anatomic monobloc stem **lateralized** - **Cementless**
- ACOR anatomic monobloc stem **standard** - **Cemented**



- EVOK femoral stem **standard collarless** - **Cementless** or **Cemented**
- EVOK femoral stem **standard collared** - **Cementless**
- EVOK femoral stem **lateralized collarless** - **Cementless**
- EVOK femoral stem **lateralized collared** - **Cementless**
- EVOK femoral stem **high offset collarless** - **Cementless**
- F.A.I.R. femoral stem **standard collarless** - **Cementless**
- F.A.I.R. femoral stem **standard collared** - **Cementless**
- F.A.I.R. femoral stem **lateralized collarless** - **Cementless**
- F.A.I.R. femoral stem **lateralized collared** - **Cementless**



- INTEGRALE femoral revision stem - **Cementless**
- GENERIC femoral revision stem - **Cemented**
- INITIALE femoral revision stem - **Cemented**



- OPTIMAL revision modular stem - **Cementless** (with modular necks)
- OPTIMAL reconstruction modular stem - **Cementless** (with modular necks)