SINCE 1983

Denti®

INNOVATIVE IMPLANT SOLUTIONS

MINI IMPLANTS

Minicare

DNB NEEDLE
Ball Head Implants

DN NEEDLE
Tapered Head Implants

MC 2026.05v01 EN

NEEDLE-SHAPED IMPLANT SYSTEMS

With the application of Minicare® small-diameter implants, patients can benefit from minimally invasive procedures that provide immediate denture stabilization. This enables quick and straightforward solutions for fixed denture retention at an affordable cost.

Minicare
minimal care

WORKS ALONGSIDE EXISTING SYSTEMS

Minicare® is not just another implant system – it's a powerful **supplementary tool** that expands clinical possibilities while offering **faster, simpler, and more affordable solutions** to patients.

EASY TO USE, MINIMALLY INVASIVE, IMMEDIATELY LOADABLE, AFFORDABLE

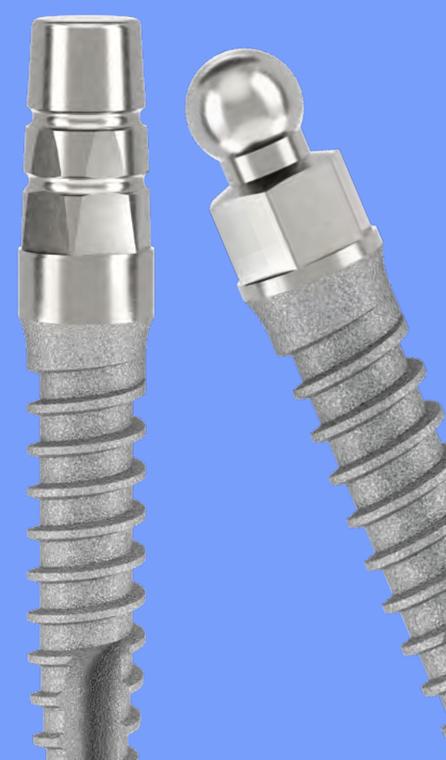
EXPANDS ACCESS TO IMPLANT TREATMENT

SIMPLIFIED SURGICAL PROCESS

FINANCIAL BENEFITS FOR BOTH CLINICIAN AND PATIENT

RELIABLE, DURABLE, AND BIOCOMPATIBLE

PREMIUM MATERIALS AND SURFACE TREATMENT

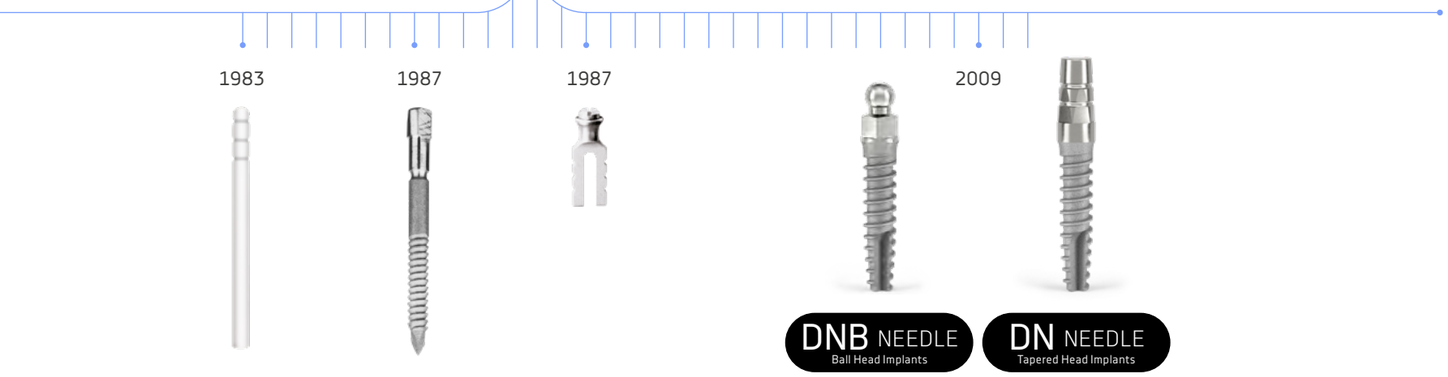


LONG-TERM SUCCESS

The first generation of Denti Diakor needle-shaped implants, made from aluminum oxide bioceramics, was introduced in 1983. By early 1987, the second generation of blade, double-needle, and needle-shaped implants was made from titanium, featuring the unique characteristic of being bendable at the neck area. Two decades later, the tapered and ball-head Minicare Implant System was introduced with diameters of 2.3 mm and 2.8 mm.

CLINICALLY PROVEN RESULTS

OVER THREE DECADES OF CLINICAL EXPERIENCE



MINIMALLY INVASIVE PROCEDURES

The surgical procedure for Minicare Implants is quick and minimally traumatic. Implantation requires minimal bone preparation, significantly reducing the likelihood of postoperative complications. Both the surgical and prosthetic processes are easy to learn, simple, and fast to perform.

Minicare Implants are immediately loadable after placement in case of adeqate bone quality. They can also be used in cases where the narrow jawbone ridge cannot accommodate two-phase implants due to their larger diameters.

APPLICABLE

- TRANSGINGIVALLY, WITHOUT SURGICAL EXPOSURE
- FOR DENTURE RETENTION IN BOTH THE MAXILLA AND MANDIBLE
- SUITABLE FOR REMOVABLE DENTURES – FOR THEIR STABILIZATION
- FOR SIMPLE AND COMPLEX UNITS, INCLUDING BRIDGES AND CROWNS

Can also be used as **temporary or permanent support** during the healing period in traditional implant-supported dental restorations. **Simple and fast** to apply.

FAST AND TRAUMA-FREE SURGICAL PROCEDURES

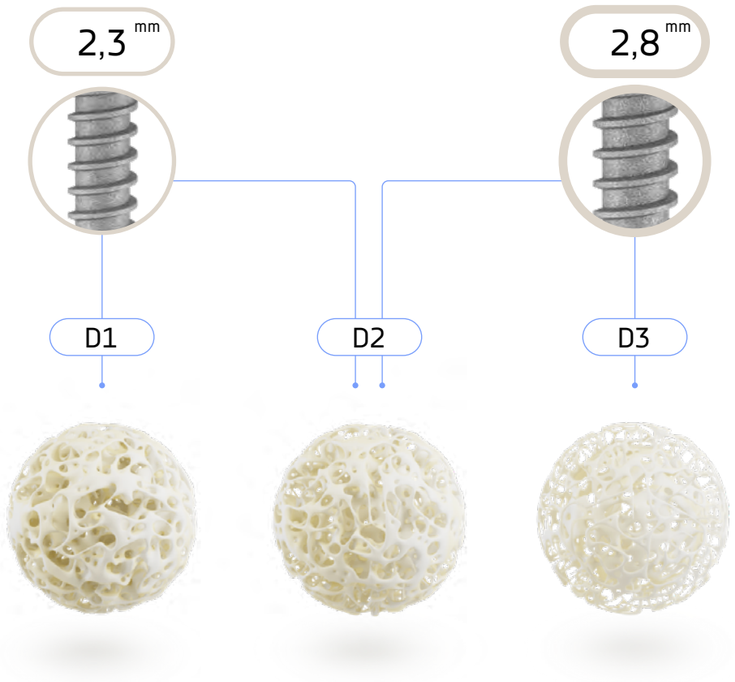
DESIGN

CLINICALLY PROVEN RESULTS

The body of the Minicare Implants is root-shaped, resembling the natural tooth root. Thanks to their specialized threading, the implants exhibit a high bone-condensing effect, ensuring perfect primary stability, even in **D3 bone quality.** Their insertion is facilitated by self-tapping edges.

The **2.3 mm** diameter Minicare® Implants are primarily recommended for **D1** and **D2** bone quality.

The **2.8 mm** diameter Minicare® Implants are primarily recommended for **D2** and **D3** bone quality.



SURFACE

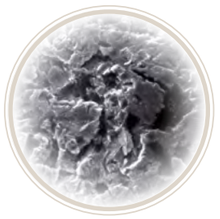
MICROPOROUS, HYDROPHILIC SURFACE

The surface of Minicare Implants is identical to the proven Denti implants, which boast a success rate exceeding **98.75%.** The implant body that contacts bone tissue has a microporous, hydrophilic surface achieved through physical and chemical surface modifications. This design provides high surface energy, ensuring the rapid and secure formation of hard tissue and long-lasting stability on the Denti implant surface.

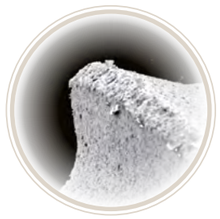
SUCCESS RATE EXCEEDING

98,75%

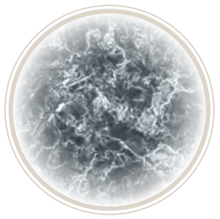
Raw processed surface



Sand-blasted surface



Passivated surface



Surface microstructure of Denti implants (MPS, SEM 500x)

Surface microstructure of Denti implants (MPS, SEM 10.000x)

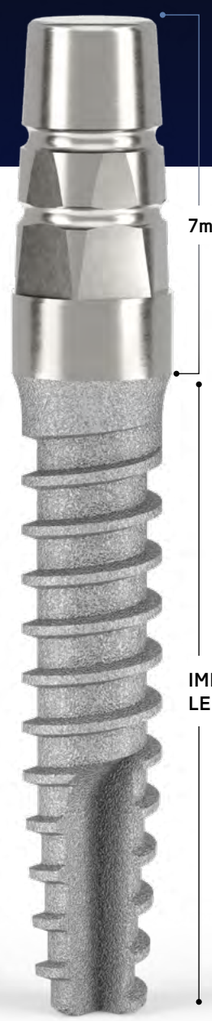
Minicare

TYPES AND SIZES

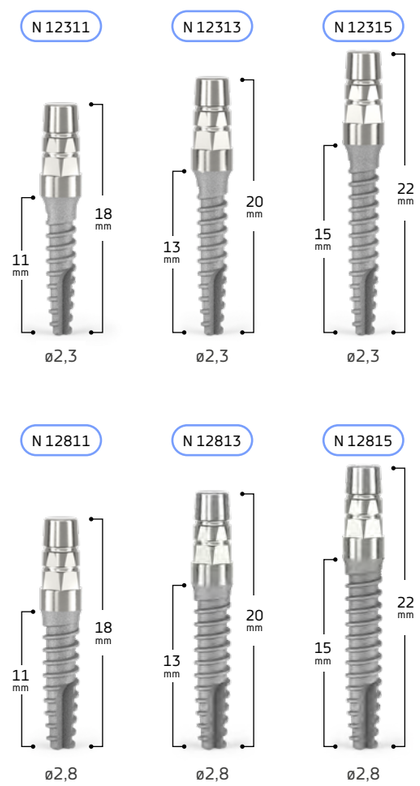
NEEDLE-SHAPED IMPLANT WITH TAPERED HEAD

The Minicare® Implant Systems are available in **two diameters** and **three different lengths**, with **two distinct head designs**.

Reference Number	Implantation Length	Total Length
N 12311	11 mm	18 mm
N 12313	13 mm	20 mm
N 12315	15 mm	22 mm
N 12811	11 mm	18 mm
N 12813	13 mm	20 mm
N 12815	15 mm	22 mm

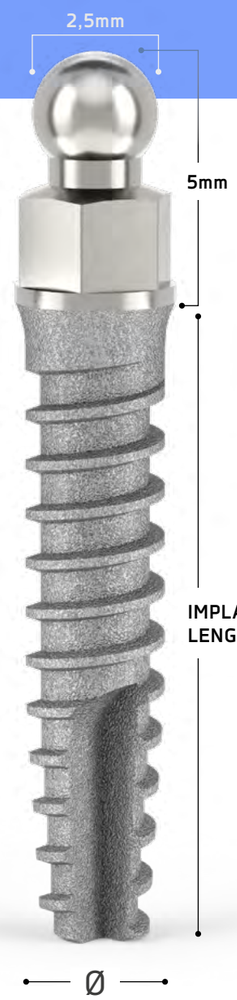


DN NEEDLE
Tapered Head Implants



TYPES AND SIZES

NEEDLE-SHAPED IMPLANT WITH BALL HEAD



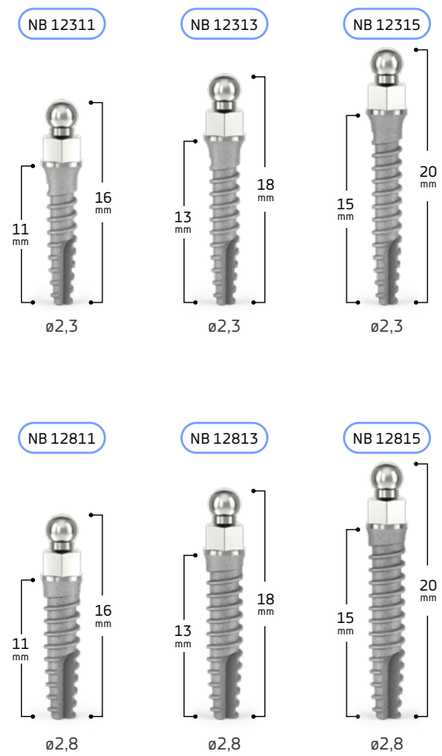
Minicare

OT CAP

compatible

Reference Number	Implantation Length	Total Length
NB 12311	11 mm	16 mm
NB 12313	13 mm	18 mm
NB 12315	15 mm	20 mm
NB 12811	11 mm	16 mm
NB 12813	13 mm	18 mm
NB 12815	15 mm	20 mm

DNB NEEDLE
Ball Head Implants



SURGICAL EQUIPMENT

SURGICAL TRAY FOR MINICARE IMPLANTS

The **Minicare®** includes a specialized surgical kit containing all the instruments necessary for surgical and prosthetic procedures. The surgical kit for the Minicare® Implant System is easy to navigate, ensuring fast, efficient, and hassle-free implant placement.

The same surgical instruments are used for both head designs (tapered and OT-CAP-compatible ball head).

REF. NUMBERS	
8000-067	Initial Drill
40018	Pilot Drill for Ø 2.3 mm Minicare® Implants
N 80028	Pilot Drill for Ø 2.8 mm Minicare® Implants
N 8000-079	Driver with power drive
8000-143	Torque-Limiting Ratchet Wrench
8000-002	Driver Manual

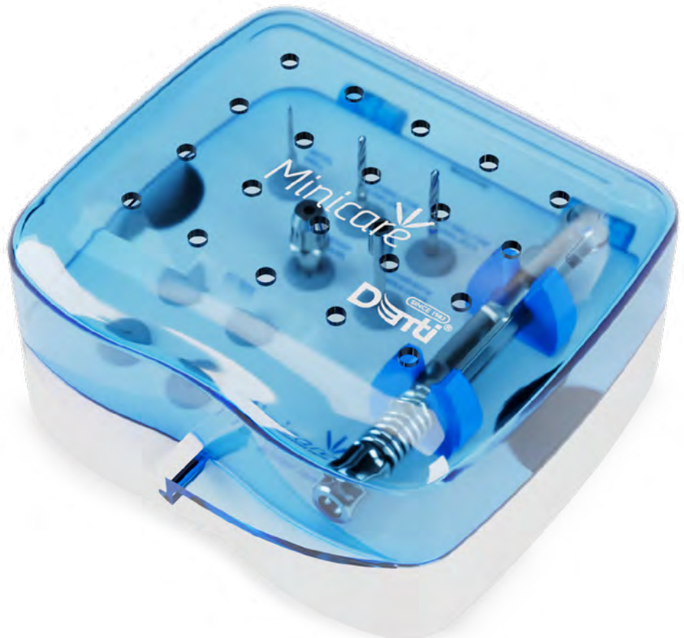
SURGICAL EQUIPMENT

SURGICAL INSTRUMENT SET FOR MINICARE IMPLANTS

Tools for accurate and efficient insertion:

Initial Drill: Used to precisely mark the implant site.

Pilot Drill: The pilot drill prepares the core hole for the implant. Select the appropriate drill diameter based on bone quality. Recommended speed: 800–1200 rpm



PACKAGING

The implants are supplied sterilized with gamma radiation. Prosthetic components and instruments must be sterilized in an autoclave prior to use.

DN NEEDLE
Tapered Head Implants

DNB NEEDLE
Ball Head Implants

eIFU
Electronic Instructions for Use

ifu.dentisystem.com

PROSTHETIC COMPONENTS

For **ball-head Minicare® Implants**, direct impression-taking is recommended. The **tapered-head Minicare®** Implant can tolerate minor angulation corrections (up to **7°**) without preparation.

REFERENCE NUMBERS	COMPONENTS AND ACCESSORIES
N 3232884	Impression Cap for Ø 2.3 mm and Ø 2.8 mm Minicare® Implants
N 3232887	Laboratory Analog Implant for Ø 2.3 mm and Ø 2.8 mm Minicare® Tapered Head Implants
NB 3232887	Laboratory Analog Implant for Ø 2.3 mm and Ø 2.8 mm Minicare® Ball Head Implants
041CAN	OT-CAP 2 pcs Stainless steel housings normal size
040CRN	OT-CAP 6 pcs Clear caps normal size (Standard retention) – 1300g
040CRNSN	OT-CAP 6 pcs Pink caps normal size (Soft retention) – 900g
049PCN	OT-CAP 6 pcs Green caps normal size (Very elastic retention) – 350g
040CRNDR8	OT-CAP 6 pcs Aqua caps normal size (strong retention) (ø 2.25 undersized internal diameter for worn out sphere) – 1300g

IMPLANT SURGICAL PROTOCOLS

DN NEEDLE
Tapered Head Implants

DNB NEEDLE
Ball Head Implants

1. Marking the Implant Site

The placement site of the implant is marked transgingivally using the **scoring drill (8000-067).** This ensures that in the next step, the corresponding **pilot drill** remains stable in the bone and does not slip.

8000-067

2. Preparing the Implant Site

For implants with a **2.3** mm diameter, use the pilot drill marked with code **40018**.

40018

For implants with a **2.8** mm diameter, use the pilot drill marked with code **N 80028**

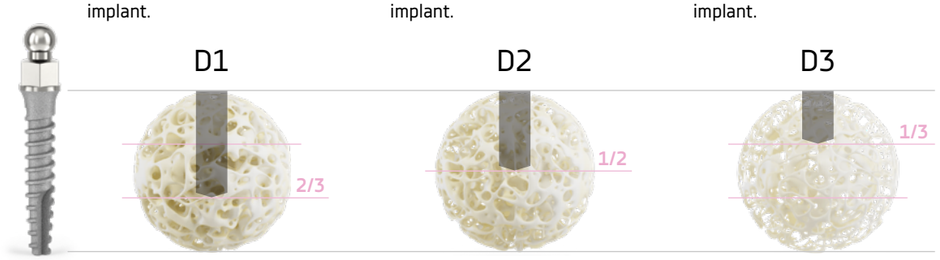
N 80028

Drilling Depth Recommendations Based on Bone Quality

D1 bone quality: Drill to **2/3** of the threaded length of the implant.

D2 bone quality: Drill to **1/2** of the threaded length of the implant.

D3 bone quality: Drill to **1/3** of the threaded length of the implant.



Important: Always perform drilling with intensive irrigation. Recommended speed: **900 – 1200 RPM**

The **Minicare implants** are equipped with **self-tapping threads,** eliminating the need for separate thread-cutting.

This initial osteotomy will define the **final angulation of the implants,** so it is **essential to maintain parallelism** between them.

3. Implant Placement

Open the sterile packaging of the Minicare implant.

Using the **implant holder,** remove the implant and begin insertion into the prepared osteotomy. The holder is suitable for the initial few turns of the implant.

Once the implant has achieved **primary stability** in the bone, gently detach the holder and proceed with one of the following methods:

a.

Attach the **Driver with Power Drive (N 8000-079)** and continue insertion using a contra-angle handpiece at low speed, applying a **maximum torque of 45 Ncm,**

N 8000-079

OR

b.

Attach the **Manual Driver (8000-002)** and continue insertion using a **ratchet (8000-143)** with **slow, controlled movements,** also limited to a **maximum of 45 Ncm** torque.

8000-002

8000-143

Continue insertion until the entire treated surface of the implant is within the bone, with only the polished collarremaining visible.

For immediate loading, a minimum insertion torque of **35 Ncm** is required.

If **45 Ncm** torque is insufficient for full insertion, the implant must be **removed** and the osteotomy **deepened** to preserve bone tissue integrity.

INDIRECT RESTORATIVE PROTOCOL

DN NEEDLE
Tapered Head Implants

DNB NEEDLE
Ball Head Implants

1. Placement of Impression Caps

Snap the **impression caps** directly onto each **Minicare implant**.

Note: The impression cap included in the system is **compatible with all types and sizes** of Minicare implants.

(3232884 Impression cap)

For **Ball Head** Implants
and **Tapered Head** Implants

2. Taking the Impression

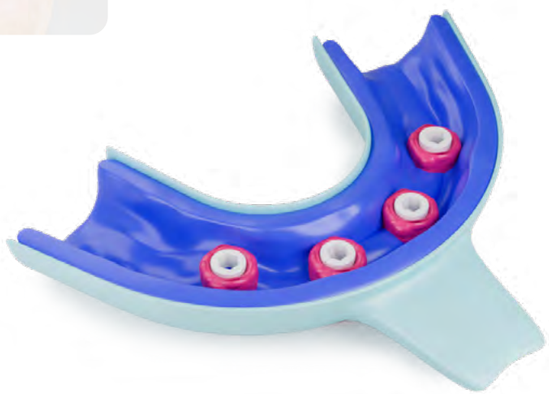
Use **standard impression techniques** to ensure that the impression caps are accurately captured and retained within the impression material.

Recommended material: Polyether impression material – ideal for high-precision implant impressions.

3. Removing the Impression

Once the impression material has **fully set,** carefully remove the impression tray from the patient's mouth.

Check to ensure that **all impression caps** are securely embedded in the impression.



4. Placement of Laboratory Analogs

Ensure that you are using the correct **Minicare laboratory analogs,** depending on the implant type used:

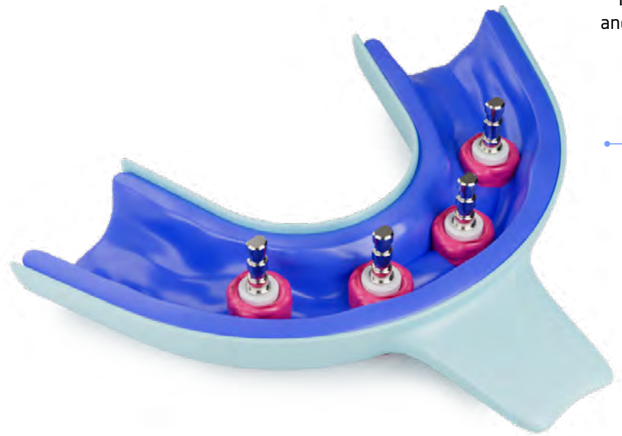
- **Minicare Tapered Head Implants:** Laboratory Analog Implant for DN, **N 3232887**
- **Minicare Ball Head Implants:** Laboratory Analog Implant for DNB, **NB 3232887**

Insert one analog into each impression cap, then prepare the impression for **plaster model fabrication.**

N 3232887

NB 3232887

For **Ball Head** Implants
and **Tapered Head** Implants



5. Fabrication of the Plaster Model

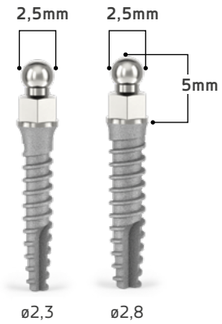
Use standard dental laboratory techniques to pour the **plaster model.** Once the plaster has fully set, **carefully remove the impression** from the model.

For **Ball Head** Implants
and **Tapered Head** Implants

DN NEEDLE
Tapered Head Implants

Reference Number	Implantation Length	Total Length	Diameter
N 12311	11 mm	18 mm	ø2,3mm
N 12313	13 mm	20 mm	ø2,3mm
N 12315	15 mm	22 mm	ø2,3mm
N 12811	11 mm	18 mm	ø2,8mm
N 12813	13 mm	20 mm	ø2,8mm
N 12815	15 mm	22 mm	ø2,8mm

DNB NEEDLE
Ball Head Implants



Reference Number	Implantation Length	Total Length	Diameter
NB 12311	11 mm	16 mm	ø2,3mm
NB 12313	13 mm	18 mm	ø2,3mm
NB 12315	15 mm	20 mm	ø2,3mm
NB 12811	11 mm	16 mm	ø2,8mm
NB 12813	13 mm	18 mm	ø2,8mm
NB 12815	15 mm	20 mm	ø2,8mm

N 3232887

Laboratory Analog Implant for Ø 2.3 mm and Ø 2.8 mm Minicare® Tapered Head Implants

N 3232884

Impression Cap for Ø 2.3 mm and Ø 2.8 mm Minicare® Implants

NB 3232887

Laboratory Analog Implant for Ø 2.3 mm and Ø 2.8 mm Minicare® Ball Head Implants

041CAN

OT-CAP metal housing

040CRN

OT-CAP retaining cap standard

041CAN

OT-CAP metal housing

040CRNSN

OT-CAP retaining cap soft

041CAN

OT-CAP metal housing

049PCN

OT-CAP retaining cap very elastic

041CAN

OT-CAP metal housing

040CRNDR8

OT-CAP retaining cap strong

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