



# PRIME ENDOSSEOUS COMPONENTS 0546

## For dental use INSTRUCTIONS FOR USE

### 1. GENERAL INFORMATION

The PRIME range implants are endosseous dental implants in pure medical-grade titanium available in the following different types: PRIME SM, PRIME SM FREE, PRIME SM COLLAR, PRIME CONOMET TS, PRIME TWINNER SM and TWINNER SM COLLAR. PRIME SM, PRIME SM FREE and PRIME SM COLLAR implants are also identified in the Information for the User as PRIME implants. PRIME TWINNER SM and TWINNER SM COLLAR implants are also identified as TWINNER implants; PRIME CONOMET TS implants are identified as CONOMET implants; PRIME SM COLLAR and TWINNER SM COLLAR are also identified as COLLAR implants. CONOMET implants have a TS implant-restoration connection; all other implants have a PERFORM SM implant-restoration connection. Each implant is provided with a dedicated cover screw. A straight abutment with fastening screw is provided only in the PRIME SM pack. All the devices contained in the pack are **STERILE** and **SINGLE-USE**. The endosseous surface varies according to the different type of implant: COLLAR implants feature a machined section of the neck, while the remaining surface is MPS-treated; all other implants feature an entirely MPS-treated surface. All implants are available in a number of different diameters and heights, to meet diverse anatomical requirements and, in order to be used correctly, practitioners must carefully read and apply the Information for the User provided by Prodent Italia. This information consists in the Instructions for Use and Clinical Protocol CL010 for CONOMET implants and Clinical Protocol CL008 for all other implants in the PRIME range. The Information for the User can also be found in the company website or by contacting Prodent Italia S.r.l. directly.

### 2. INDICATIONS

The different types of PRIME implants, considered as a whole, allow us to treat all cases of aesthetic and functional rehabilitation using endosseous dental implants. They can be used in both the upper and lower arches in patients with partial or total edentulism. Restoration may involve single crowns, bridges, partial or full-arch dentures. Entirely MPS-treated implants are mainly suitable in those cases where the practitioner believes it is possible to position the implant at a crestal level or, in biotypes with thin gingival tissues, at a slightly subcrestal level. COLLAR implants are mainly suitable in those cases where the practitioner believes, based on his evaluation of the clinical case, that the implant neck will protrude with respect to the bone crest. Prodent Italia recommends that you evaluate the bone quality during surgery planning, the size of the implant to be used depending on the position in the oral cavity, the implant primary stability at the end of placement, the implant-to- prostheses geometric ratio during restoration planning, and that you schedule and conduct regular check-ups. The general instructions to be followed by the patient after surgery are given on the back of the Dental Implant Passport, found inside each implant pack.

### 3. CONTRAINDICATIONS

Endosseous implants are contraindicated in patients who, in general: are in a poor state of general health; have a systemic illness or cancer; have severe immune system, cardiac, neurological or endocrine disorders; have chronic or acute infectious diseases; have serious vascular problems; have chronic jaw osteitis; have inadequate and/or poor quality bone tissue; suffer from bruxism; have poor oral hygiene; are addicted to nicotine; have an unsuitable mental profile; are drug users; are alcohol abusers; are pregnant; are allergic to titanium or similar metals; are frequently exposed to radiation. Any adverse periodontal problems must be resolved before placing implants.

### 4. SIDE EFFECTS AND COMPLICATIONS

After dental implant surgery, patients may experience temporary side effects such as pain, swelling, haematomas, speech problems, and inflammations of the soft tissues. Despite the high success rate for implant procedures and their stability, the risk of failure cannot be completely ruled out. The long-term risks that can be associated to implant procedures include bone reabsorption, failure of integration, oedema, chronic pain and dehiscence. Implant treatment success is closely related to the correctness of the medical diagnosis, treatment planning and the surgical and restoration technique adopted. Practitioners are asked to report any instance of failure to Prodent Italia S.r.l.

### 5. PACKAGING AND STERILITY

Each implant is supplied **STERILE** inside a plastic container. The implant is fitted in a pure medical-grade titanium ring. In addition, the apex of TWINNER implants rests on a pure medical-grade titanium disk, in turn supported by a plastic spacer. The cover screw is fitted into the cap which closes the implant housing. The straight abutment, where provided, is screwed by means of its own fastening screw to the other cap of the container. The plastic container is supplied inside a sealed plastic blister to preserve sterility. The blister comes inside a cardboard box with closing seals for optimal storage. The implant label is found on the box. The box also contains the Instructions for Use, the patient's Dental Implant Passport and the extra peel-off label with the device's identification details to be attached to the patient's clinical records. The implant housing and its extraction instruments make it possible to avoid contact between the surface of the implant and other components and surfaces other than titanium before placement in the site.

### 6. STORING AND HANDLING THE PACK

The sterility of each implant until the expiry date indicated on the label is assured by storing it inside its original pack, sealed and undamaged, in a dry place at room temperature. Before using the implant, always check that the pack is undamaged and has no visible signs of damage that could compromise its sterility. The pack must not be opened until the implant is to be used. The blister must be opened and the implant taken out in conditions of asepsis.

### 7. INDICATIONS FOR IMPLANT PLACEMENT

After preparing the implant site (see Protocols CL008 and CL010), open the blister and remove the device plastic container. Open the plastic container by turning the implant housing cap anti-clockwise and pulling upwards to remove it.

**N.B.:** The cover screw is fitted into the cap of the implant housing.

#### 7.1 MANUAL IMPLANT PLACEMENT

Pick the implant up using a suitably sized driver of the appropriate restoration range, connected to the Digital Wrench. Insert the driver in the implant connection. Check that the driver has completely engaged the implant connection. If necessary, turn the driver to ease insertion. Remove the implant from the container and visually check that there is no gap between the driver and the implant platform (take the ring marked on the driver as reference). Move the implant to the receptor site, position it so that it is firm and stable and disconnect the digital wrench. Connect the driver to the Ratchet and tighten the implant until it reaches its correct final position; NEVER exceed 60 Ncm. When insertion is complete, disconnect the ratchet and driver from the implant.

#### 7.2 MECHANICAL IMPLANT PLACEMENT

Pick the implant up using a suitably sized driver for contra-angle of the appropriate restoration range, connected to the contra-angle. Insert the driver in the implant connection. Check that the Contra-angle Driver has completely engaged the implant connection. If necessary, turn the driver to ease insertion. Remove the implant from the container and visually check that there is no gap between the driver and the implant platform (take the ring marked on the driver as reference). Take the implant to the receptor site and screw in the implant until it reaches its correct final position, without EVER exceeding 25 rpm and 45 Ncm.

Once insertion is complete, disconnect the insertion instruments from the implant.

Once the insertion of the implant into the surgical site is complete, use the hex screwdriver to unscrew the cover screw from the cap and screw it into the implant. The cover screw is colour-coded and specific to the implant in the same pack.

### 8. USING THE STRAIGHT ABUTMENT

The straight abutment, where provided, comes with a fastening screw and is designed for use as a temporary or permanent abutment to fit cemented restorations, as decided by the practitioner during the clinical assessment phase. The abutment is intended for implants with a matching connection ONLY. Straight abutments must be handled by **qualified technical staff ONLY and under the practitioner's responsibility**. The abutment does not need to be cleaned and sterilised when used untrimmed and in the same surgical session as the implant. Otherwise, immediately before its use on the patient, it **MUST be cleaned and sterilised using a validated method and under the practitioner's responsibility** (Prodent Italia recommends following ISO 17665-1 and EN 13060 standards). Prodent Italia S.r.l. provides information concerning the washing process in protocols CL008 and CL010 and has verified the effectiveness on restoration devices of sterilisation in a saturated steam autoclave at 134°C for 5 minutes. When abutments are used, the fastening screws must be tightened using a torque instrument set to 30 Ncm.



#### WARNINGS

- BEFORE using PRIME implants read the updated Information for the User carefully.
- The name on the device label alone may not be sufficient to identify its intended use: see the Information for the User.
- PRIME implants **MUST** be used by qualified dental staff fully knowledgeable with the theoretical and practical aspects of implantology only.
- Before use, ALWAYS check that the pack, blister and device are undamaged and NEVER use PRIME implants with visible signs of damage.
- Use implants BEFORE the expiry date on the label, otherwise their sterility could be compromised.
- Implants may NOT under any circumstances be re-sterilised.
- NEVER REUSE implants. Reuse of the device involves a high risk of infection, contamination and implant failure.
- All the devices must be handled with the greatest care, to avoid accidental damage that could cause them not to function properly.
- Handle all the devices in aseptic conditions and wearing sterile gloves.
- Implants must ONLY be used with surgical instruments and dedicated restoration components (see Protocols CL008 and CL010).
- When removing the implant from the plastic container, make sure that the Driver or Contra-angle Driver correctly engages the implant connection.
- NEVER exceed 25 rpm when placing the implant mechanically.
- Take special care, particularly when placing multiple implants during the same session, with the identification of each device (e.g. laser marking, colour-coding) to avoid switches or incorrect implant-screw-abutment coupling.
- The choice and performance of the surgical technique used to prepare the receptor site are the practitioner's responsibility. The surgical procedures described in protocols CL008 and CL010 make it possible to obtain a receptor site suited to the placement of implants without forcing tightening.
- In addition to the surgical technique, the practitioner is also responsible for: diagnosis; treatment planning; any handling and sterilisation of straight abutments; checking the osteointegration and the stability of the implant and the restoration superstructures; planning and performing regular check-ups. Mistakes and imprecision in these phases may jeopardise the success of the treatment and lead to loss of the implant.
- It is the practitioner's responsibility to record the implant details on the patient's dental records, together with the necessary data on the Dental Implant Passport and to give the latter to the patient, informing him/her of the importance of correct oral hygiene and attending the check-ups scheduled.
- The device **MUST** be handled as hospital waste in the event of disposal. The device must therefore be disposed of according to applicable legislations whenever necessary.
- Prodent Italia S.r.l. ONLY accepts returned devices in their undamaged original packaging and within the contractual terms provided.
- Prodent Italia S.r.l. declines all liability in the event that the updates to the Information for the User are not observed.
- Prodent Italia S.r.l. furthermore declines all express or implicit liability in relation to direct, indirect or any other type of damage which may be connected to or arise from any evaluation or professional practice error, made during the use of the various products manufactured by Prodent Italia. The use of dental implants, all surgical treatments and prosthetic restorations must always be made under the practitioner's control, who therefore assumes full liability thereof. The user of Prodent Italia's items is solely responsible for evaluating whether a product is suitable or not for each individual patient and clinical case.

#### KEY for the symbols on the label:



DO NOT reuse! The device is SINGLE-USE and intended to be used once and on one patient only. Re-use could cause serious risks of cross-infection and/or loss of functionality.



Use by (expiry date: year/month/day).



Sterilised using  $\gamma$  radiation



Batch code.



Catalogue number.



Caution! The device is associated with warnings not indicated on the label and that are described in the Instructions for Use.



Consult the Instructions for Use inside the pack



DO NOT use if the package is damaged



Manufacturer pursuant to 93/42/EEC and subsequent amendments