



Aesthetics in perfection!

Biocompatible, of course

Meet the expectations of your patients in aesthetic restorations, free of any metallic properties! The whiteSKY system consisting of zirconia is completely biocompatible and ideally suited for even the most sensitive patients.



Dr. Jörg Neugebauer,
University of Cologne

In our study ¹⁾ we found that zirconia implants behave very similarly to titanium implants, meaning that when they are used precautionary measures should also be taken. Therefore, we use the single-phase zirconia implants as immediately provided titanium implants:

- Very accurate preoperative planning
- Sufficient bone supply
- Two-stage augmentative procedures, if necessary
- Primary stability of 30 to 45 Ncm




Temporary restoration is especially important to us. We proceed as follows:

- Large contact surfaces with the adjacent teeth
- No occlusion contact, even under load.
- Blocking with adjacent teeth by acid-etching technique
- Close recall in the first 6 weeks to check the blocking.

1) Neugebauer J. et al.: Immediate Loading of Ceramic Implants with Various Surfaces and Designs; Academy of Osseointegration 2007, San Antonio

whiteSKY system overview

Implants

| Ø 3.5 mm | Ø 4.0 mm | Ø 4.5 mm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|-------|----------|-------|----------|-------|----------|-------|----------|--|--------|-----|------|----------|-------|----------|-------|----------|-------|----------|-------|----------|--|--------|-----|------|----------|-------|----------|-------|----------|-------|----------|
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| 12 mm | SKY3512C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 mm | SKY3514C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 mm | SKY3516C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Length | REF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 10 mm | SKY4010C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 mm | SKY4012C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 mm | SKY4014C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 mm | SKY4016C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Length | REF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 mm | SKY4508C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 mm | SKY4510C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 mm | SKY4512C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 mm | SKY4514C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Surgical instruments



whiteSKY
Upgrade Kit



Accessories

whiteSKY
prosthetic coping
Ø 3.5 mm and 4.0 mm



whiteSKY
prosthetic coping
Ø 4.5 mm



The prosthetic parts for the whiteSKY implant make your work much easier:

The whiteSKY prosthetic coping serves as the basis for the temporary restoration and prevents the implant abutment from overgrowing with very tight gingiva.

000168GB-20190122 Mistake and subject to change reserved



whiteSKY: Naturally beautiful

Metal-free aesthetics

The demands of your patients on the aesthetics of prosthetic restoration are growing. The tooth-coloured whiteSKY implant made of zirconia dioxide from breident medical meets the highest aesthetic demands of your patients.

No dark shadows impair the beauty of the prosthetic restoration. Even at low gingival heights

It offers an optimal result. Your patients will be permanently satisfied with whiteSKY implants and will recommend them to you - there is no greater compliment that a patient can give you!

For the growing number of patients that are sensitive to metals, the whiteSKY zirconia implant offers a reliable solution. The metal-free nature of the product protects your patients from unwanted adverse reactions.



whiteSKY: The proven ceramic implant



- High primary stability due to bone condensation
- Optimum soft tissue attachment
- Low plaque accumulation
- Outstanding esthetic results
- 100% metal-free
- Long-term studies available (10 years)

High strength due to design and material

Zirconia exceeds titanium not only in terms of strength; the one-piece design of whiteSKY provides added reliability since problems with attachments are eliminated.

Ideal elasticity

Similarly, zirconia has excellent elastic properties, meaning that it is less brittle than aluminium oxide and therefore less prone to breakage. It is also more stable than titanium and therefore less deformable.

Long-term break resistant

In addition, brezikron facilitates a kind of built-in defect blocker. This means that micro fractures are stabilized through phase transformation from tetragonal to monoclinic, which prevents the fracture's progressive movement.

In summary, zirconia is an ideal implant material.

Physical properties of zirconia

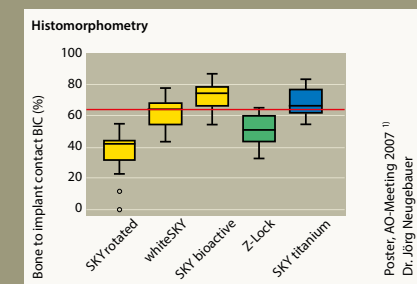
| | |
|--------------------|----------------------|
| Flexural strength | 1250 MPa +/- 120 MPa |
| E-modulus | 200 GPa |
| Fracture toughness | 6-8 MPa/m |

Radiation properties

| | |
|-------------|------------------------------------|
| α-radiation | 0.131 - 0.0004 mBq/cm ² |
| β-radiation | <0.32 Bq/g |
| γ-radiation | not demonstrable |

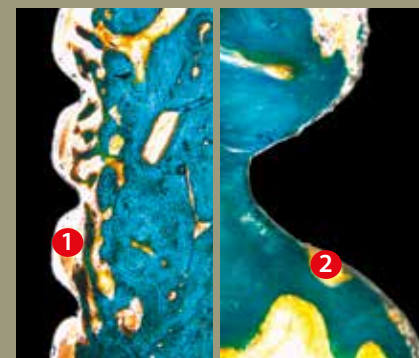
The radiation exposure of zirconia is so low that any health risk to patients is eliminated.

Scientifically confirmed

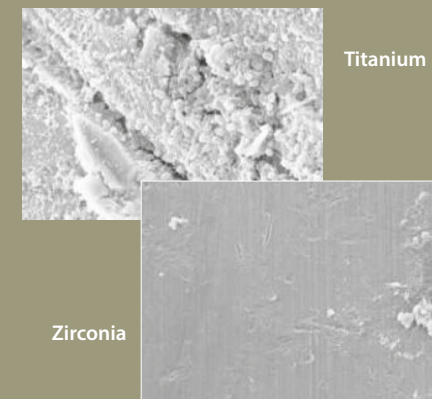


Osseointegration of zirconia and titanium surfaces

A study¹⁾, carried out at the University of Cologne and Belgrade showed that the bone-implant contact of the blasted whiteSKY zirconia implants is at the same level as the bone contact of the blasted SKY titanium implants. On the other hand, the level was significantly higher than that of rotated titanium implants without surface treatment and above that of a competitor's zirconia implant.



A study by the University of Dresden²⁾ shows very good results regarding the osseointegration of the whiteSKY zirconia implant. Significantly, the newly formed bone can be recognised, 1, as well as osteoblasts 2, which have attached directly to the surface.



Long-term success through low plaque formation³⁾

A study by Scarano et. al. very clearly shows that plaque formation is considerably lower for zirconia surfaces than for titanium surfaces under the same conditions. Therefore, it can be deduced that the risk of peri-implantitis is further reduced by the smaller number of possible pathogenic germs in the biofilm.

1) Neugebauer J. et al.: Immediate Loading of Ceramic Implants with Various Surfaces and Designs; Academy of Osseointegration 2007, San Antonio
 2) Stadlinger B. et al.: Comparison of zirconia and titanium implants after a short healing period. A pilot study in minipigs; International Journal of Oral Maxillofacial Surgery 2010; 39; 585 - 592
 3) Scarano A. et al.: Bacterial adhesion on c.p. titanium and zirconia oxide disks: An in vivo human study. J. Periodontol February 2004; Vol. 75, No. 2, 276-280

Optimise processes

Image: Dr. Andrea Enrico Borgonovo, Italy



After the operation



After 1 year



After 10 years



Dr. Andrea Enrico Borgonovo
Italy

After more than 10 years of experience with the breident medical whiteSKY zirconia implant, scientifically sound long-term results can be presented for the first time together with the University of Milan. Ceramic as a material is not new to implantology, and over the past decade, this version of zirconia implants has earned itself a good reputation. Demanding results especially in the aesthetic zone are possible, caring for patients with an allergic disposition to metals protects their health and the risk of peri-implantitis is almost eliminated. These advantages more than offset the somewhat higher requirements for one-piece implants until final osseointegration. The long-term results clearly confirm this. All implanted implants are still in perfect working order today. In particular, the stable peri-implant bone level, healthy gums and patient satisfaction should be emphasised. There have been no cases of peri-implantitis in the implants placed and implant fractures have not been observed over the years.



Dr. Raquel Zita Gomes
Portugal

I always recommend breident medical's whiteSKY when patients request a ceramic implant restoration. With more than 12 years' experience and long-term results spanning more than 10 years, it is one of the most studied ceramic implants in the world and gives me the confidence to make my patients happy.