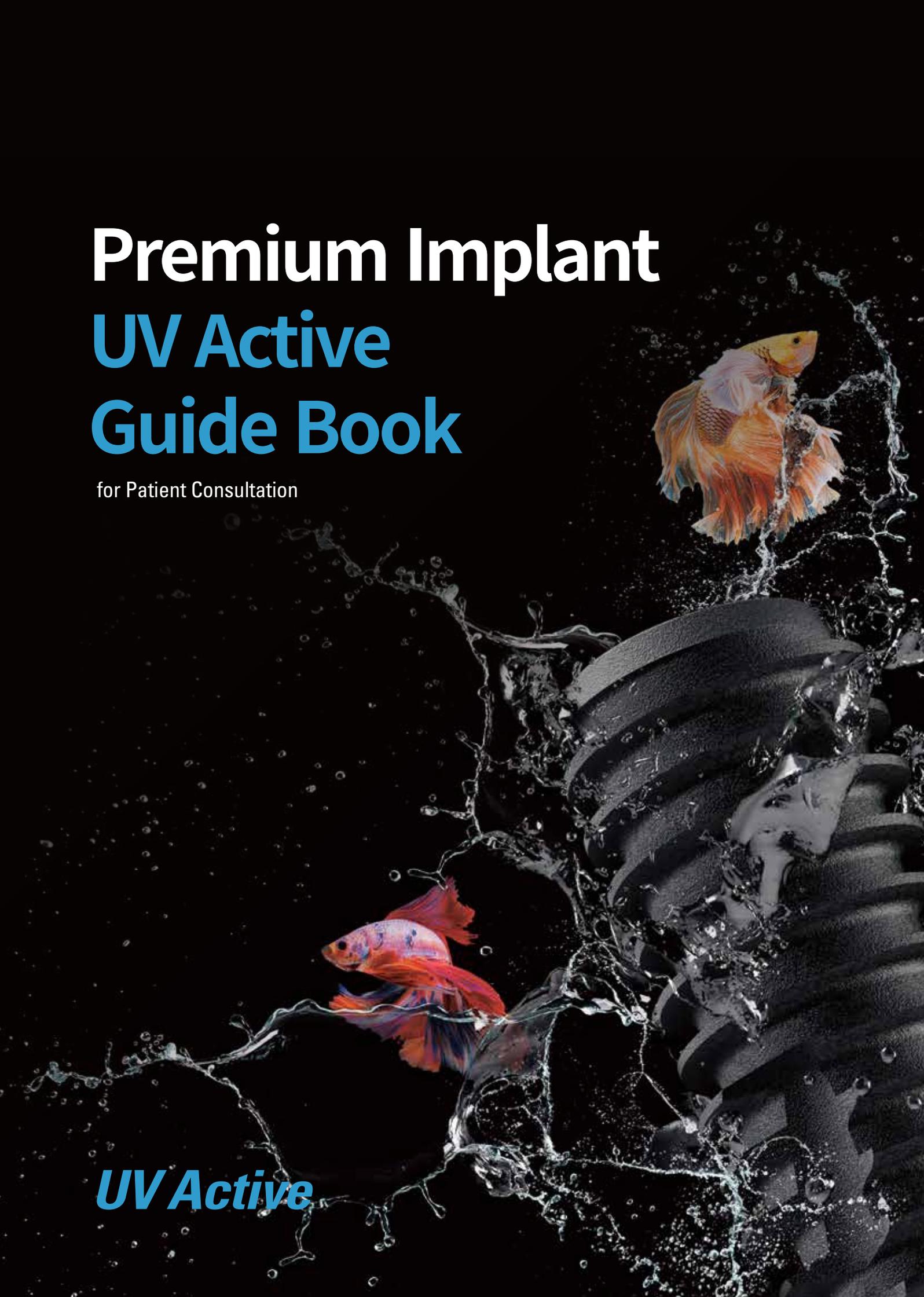


Premium Implant UV Active Guide Book

for Patient Consultation

UV Active



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Special?		

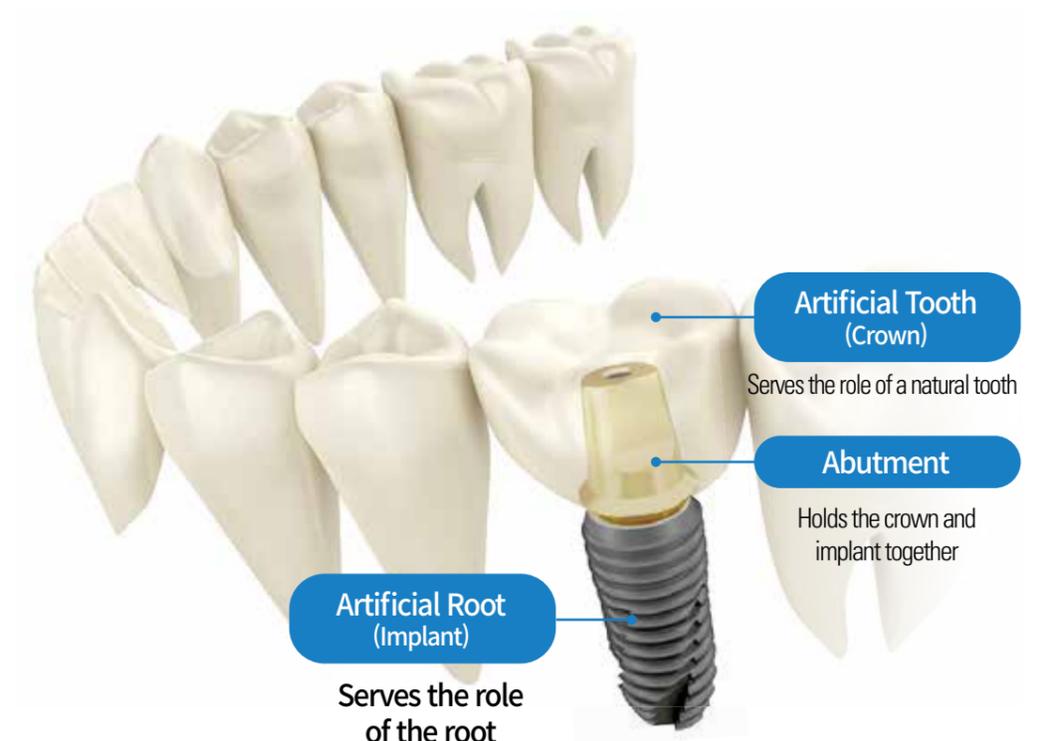
Part 1.

What are dental implants?

1-1.

Implants are your second permanent teeth

Implants are artificial tooth roots that are placed on the sites where teeth are missing, to be loaded with artificial teeth to provide a safe treatment solution that can provide similar functionality as natural teeth.



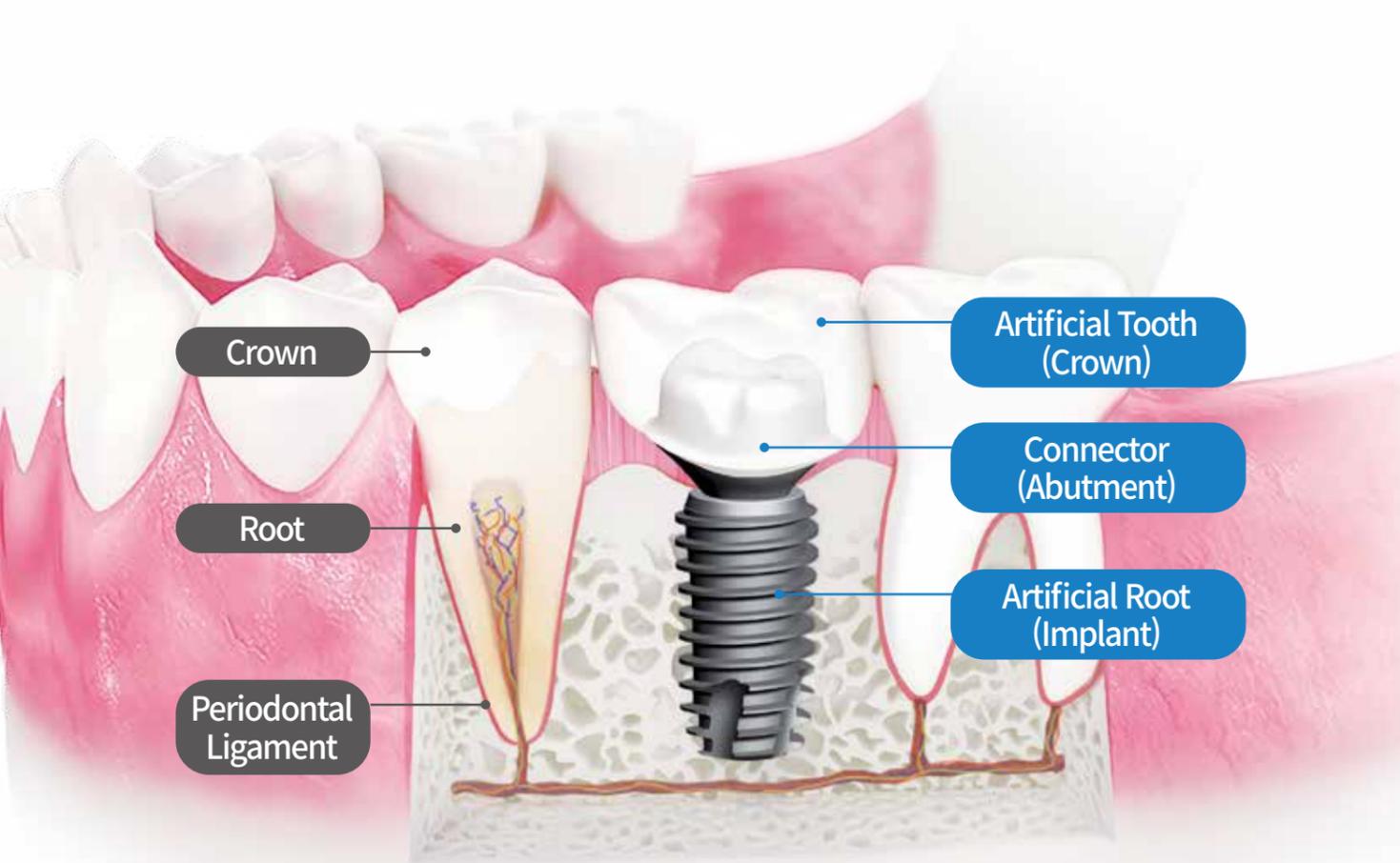
*** Material : Titanium**

A metal that has excellent biocompatibility and used in many other medical device applications

The most critical factor of a successful implant procedure is whether the implants are **securely integrated with the bones.**

1-2.

How do implants differ from natural teeth?



Natural Teeth	vs	Implant
Absorb external impact from damaging teeth roots		Firmly fixed and integrated to the jaw bone (The chewing ability is similar to natural teeth)
Feel sensory stimuli e.g. touch or movement		Cannot feel pain, fine senses, or texture of food
Regenerate bone tissues and shift teeth to maintain balance		May require artificial bone grafting in case of lacking bones (Does not develop cavities and can be used semi-permanently)

1-3.

What happens if you don't replace a **missing tooth**?

01



Misalignment

Adjacent teeth lean or shift into the missing gap, causing misalignment and ultimately damaging the jaw bones.

02



Overeruption of opposite tooth

When you are missing a tooth in the lower jaw, the absence of opposing force causes the opposite tooth on the upper jaw to overerupt out of normal occlusion.

03



Deterioration of digestive function

Food is not properly chewed and hence does not digest well in the stomach.

04



Malnutrition

Balanced intake of nutrition is difficult as the food that you can eat are limited.

05



Depression

You are discouraged as you cannot make a confident smile due to loss of tooth.

06



You look old

You look much older than your age as the face changes due to loss of alveolar bone.

1-4.

What benefits can you expect from having an implant surgery?

You can maintain healthy dentition around the surgical site.

Implants have long lifespan and near-permanently used.

Implants prevent bone absorption and maintains healthy bones.

Implants look natural and beautiful.

You can enjoy food better than using a denture.

Masticatory force is comparably similar to natural teeth.

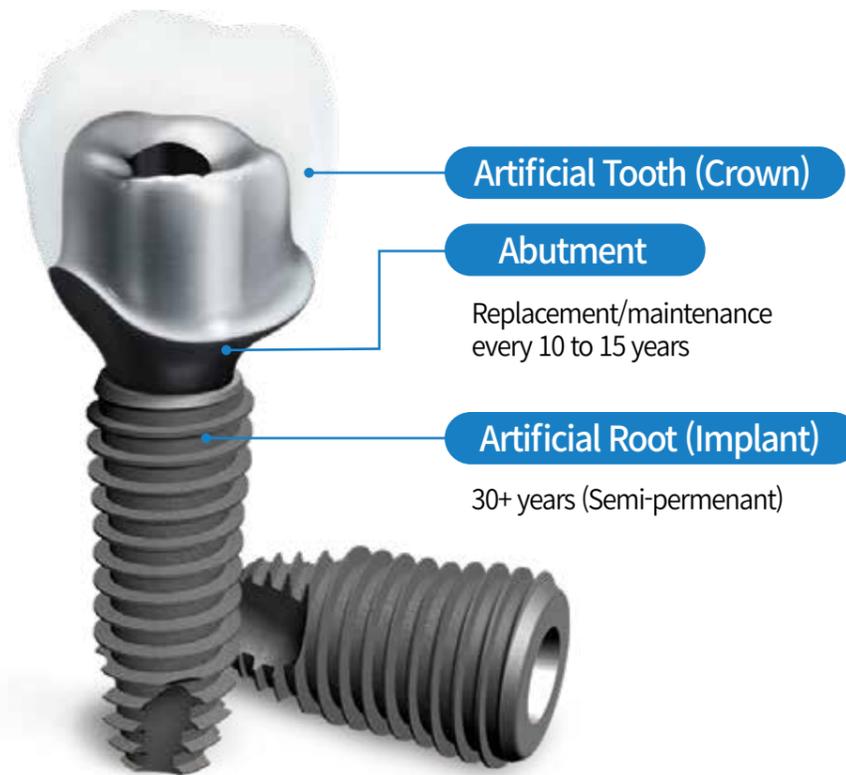


	Implant	Bridge	Denture
Treatment Process	Insertion of an artificial tooth root into the bone	Delete adjacent teeth and cover end to end with connected artificial teeth	Fabricate a standardized teeth model
Damage	No damage to adjacent bones	Involves partially deleting natural adjacent teeth	Jaw bones are absorbed over time
Treatment Period	3 to 6 months	Short	Short
Replacement	Semipermanent (Subject to individual maintenance)	Replaced every 5 to 10 years	Replaced every 3 to 4 years
Chewing strength	Similar to natural tooth	Weak	Difficult to eat tough or hard food
Cost	High initial cost; long life	Low initial cost	Low initial cost; periodical replacement cost
Satisfaction	Minimal foreign sensation and highest satisfaction rate	Involves damaging adjacent teeth and short	Severe foreign sensation and aesthetically poor

※ Bridges and dentures take shorter treatment period compared to implants, but periodically require additional treatment and procedures due to loss of adjacent teeth and surrounding bones.

1-5.

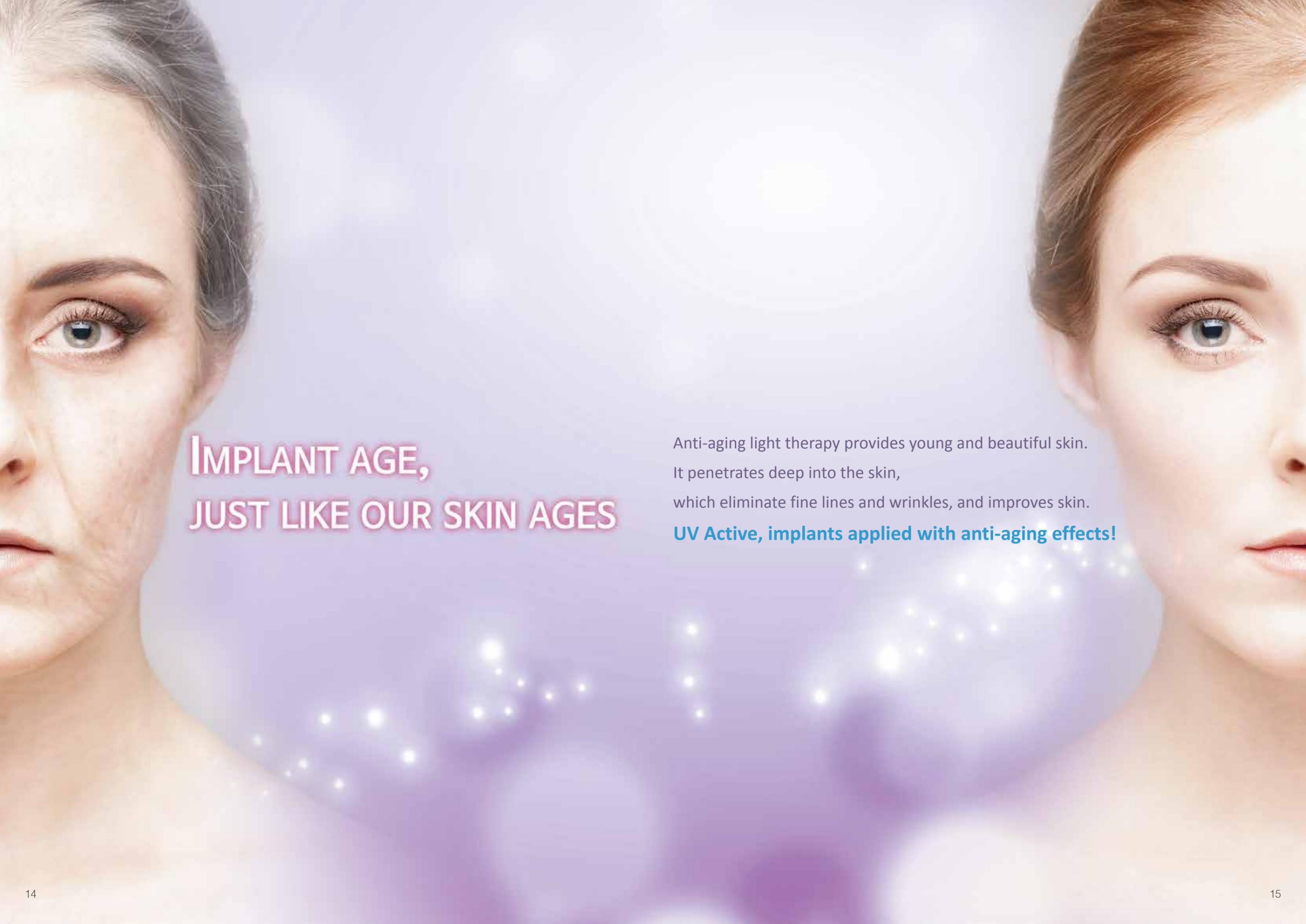
How long is the **lifespan**
of implants?



You can extend the lifespan of your implant by seeing your doctor regularly for periodical maintenance and checkup.

Part 2.

Why should I choose, UV Active?



**IMPLANT AGE,
JUST LIKE OUR SKIN AGES**

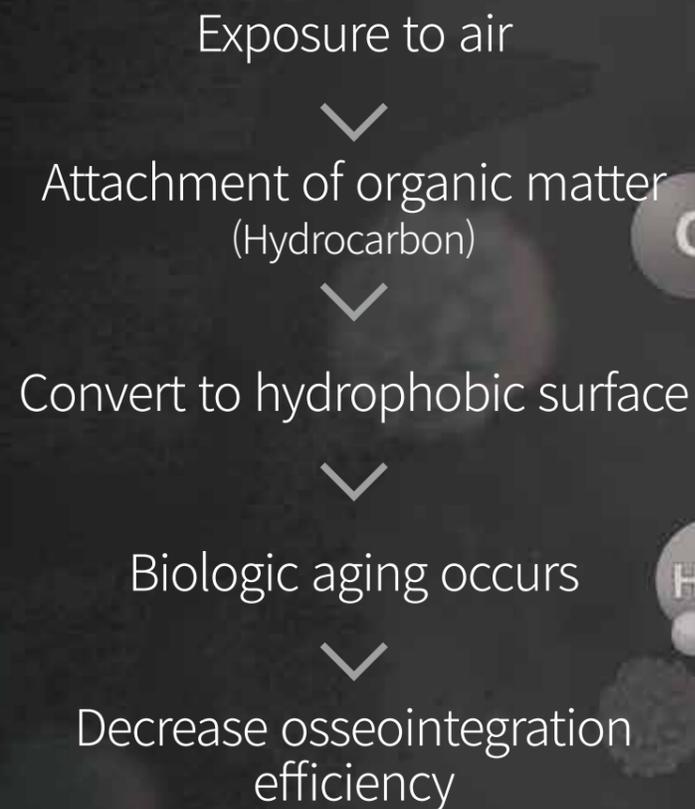
Anti-aging light therapy provides young and beautiful skin.
It penetrates deep into the skin,
which eliminate fine lines and wrinkles, and improves skin.

UV Active, implants applied with anti-aging effects!

UV UNTREATED

Biological aging

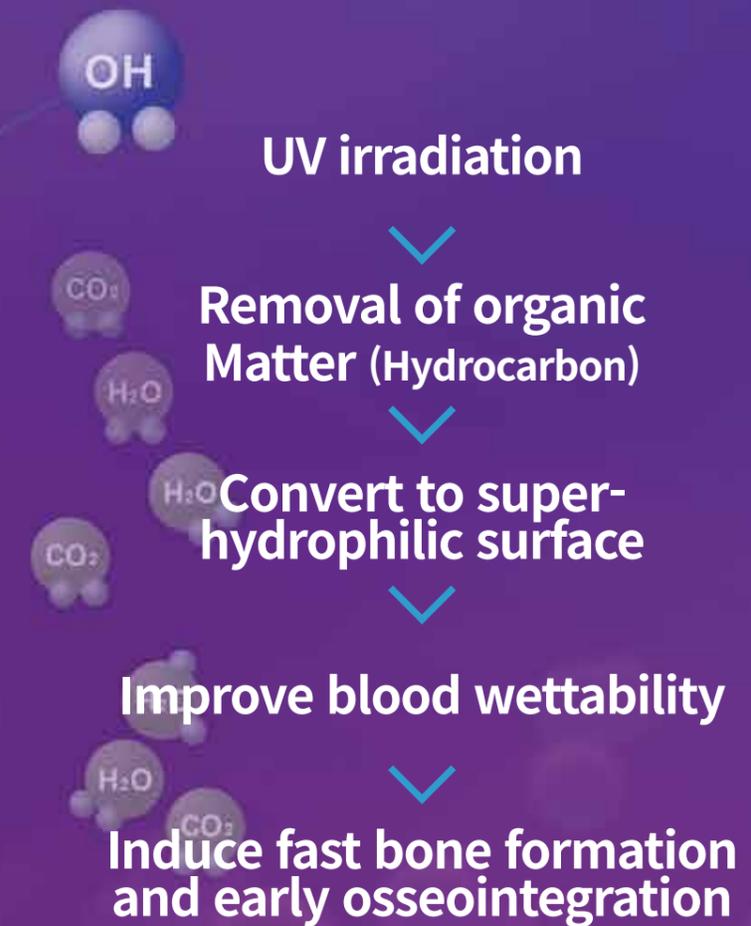
As soon as it is exposed to air, biological aging occurs on the implant surface.



UV TREATED

UV Photofunctionalization

UV photofunctionalization is a series of surface modification on implant surfaces occurring after UV treatment



2-3.

Complete UV Photofunctionalization Safely & Powerfully, **UV Activator**

UV Photofunctionalization converts the implant surface from hydrophobic superhydrophilic and removes organic matters from the surface.

Core values of UV Activator

1 UV Activator

UV treatment in just 20 seconds with the powerful 360° UV irradiation design



2 UV Active

Unique double-layer packaging ampoule to prevent even the slightest chance of contamination



Part 3.

Experimental Results



3-1.

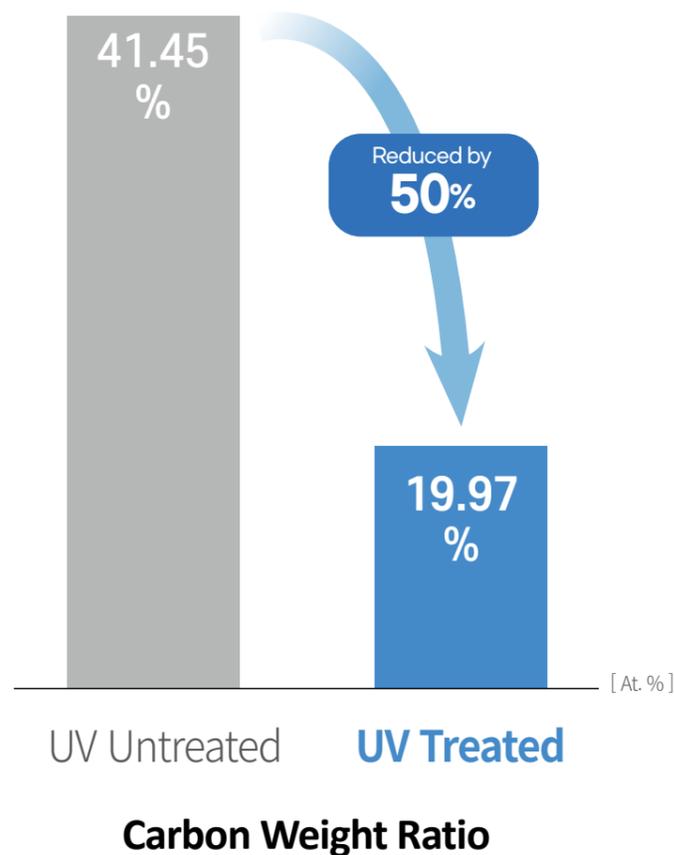
Because Implant is placed into my body

UV Active is clean

UV photofunctionalization can remove about half of unavoidably contaminated hydrocarbons on implant surface before placement, which increases BIC ratio.

XPS Analysis Result

Measurement of percentage of carbon weight on implant surface by center of research facilities at Pukyung National University, Korea



3-2.

UV Active, a clean implant

High BIC for the stable formation

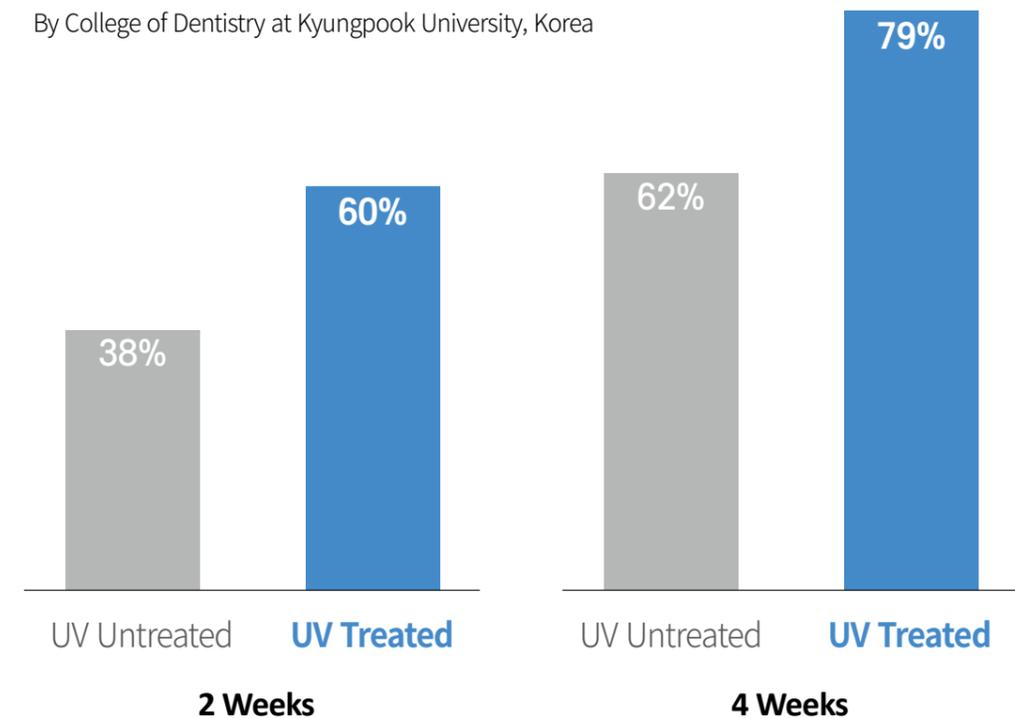
01 UV treated implant to remove organic matter from surface induces stable bone formation because the implant has a high BIC

02 Implant failure rate is low because of high level of bone intensity during formation.

(Higher about 40% compared to untreated implant, T. Ogawa Prof., UCLA)

BIC experiment after UV treatment

By College of Dentistry at Kyungpook University, Korea



* BIC : Bone to implant contact is a term that refers to how much of the implant surface is touching bone on a microscopic level and is graded as a percentage.

3-3.

UV Active has superhydrophilicity Absorbing blood faster than ever

UV treatment converts the implant surface to superhydrophilic, it can induce to increase blood wettability and promote bone formation around implant area.

UV untreated
Hydrophobic

UV Treatment

UV treated
Superhydrophilic

Water bubbles do not absorb but forms on surface

Water bubbles absorb immediately

3-4.

UV Active, a UV photofunctionalized implant Faster osseointegration

UV photofunctionalization is a series of modifications to the surface of the implant using the UV Activator. And this modification promotes making the surface clean and improves blood wettability. As the result, it can induce faster osseointegration and early loading of prosthesis.

UV untreated

UV Treatment

UV treated

(%)

100

75

50

25

0

0 1 2 3 4 5 6 7 8

Time (weeks)

Old Bone

New Bone

Total Stability

Level of stability falls rapidly at 4 weeks after implant placement, and stable osseointegration is only possible after 3 months of placement.

(%)

100

75

50

25

0

0 1 2 3 4 5 6 7 8

Time (weeks)

Old Bone

New Bone

Total Stability

Stable osseointegration is possible from just 2~4 weeks after implant placement with the fast formation of new bone.

Part 4.

Why is UV Active Special?

4-1.

UV Active is an effective implant for :



4-2.

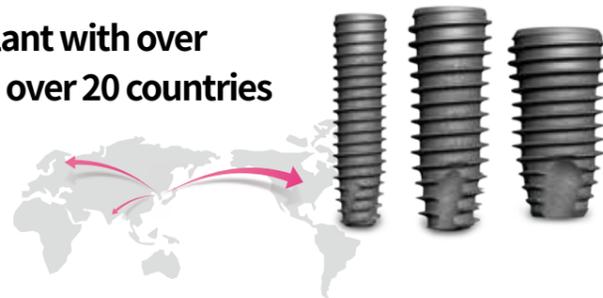
UV Active is a proven implant
You can trust

01 A patented cutting-edge technology
(Most number of patents in Korea regarding UV photofunctionalization, based on 2018)

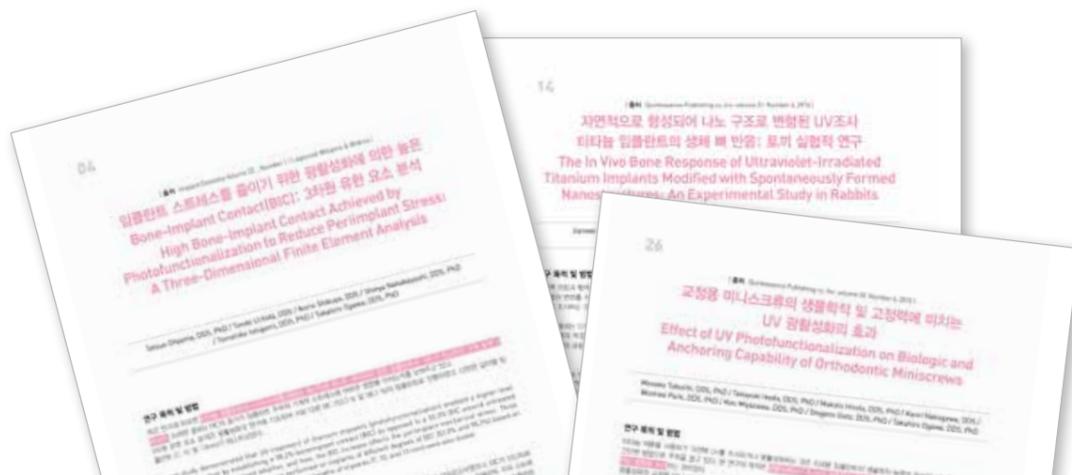


02 Globally verified implant with over 700,000 placement in over 20 countries

Over 700Kpcs
as of March 2022



03 Efficacy and stability proven in multiple papers from Japan and the United States. (UV photofunctionalized implant).



4-3.

Testimonials



Dr. Jaeseok Kang

Yedam Dental Hospital, Republic of Korea

Placed UV Active in the wide-area of maxillary sinus and measured ISQ. I saw rapid osseointegration after 2 months. Strongly recommend UV Active when you need to place a lot of bone graft in the maxillary sinus or if it is just a GBR case.



Dr. Jungwook Seo

Yonsei Dental Clinic, Republic of Korea

The benefits of the UV Active are it increases the initial stability when placed after UV surface treatment and it also extends the implant shelf life.



Dr. Riley Clark

WhiteCap Institute, USA

One of my personal game-changers is UV Active which is superhydrophilic Implant.

We have that special obligation in the doctor-patient relationship to always offer the most contemporary and best practices and although this UV light activation photo functionalization is a newer topic it's an exciting topic and we're excited to dive into it and talk about some of the benefits for us as a clinician.



Dr. Hyangyeon Lee

Michigan Dental Clinic, Republic of Korea

UV Active is perfect to use when placing an immediate temporary after extraction or for a GBR case due to its fast osseointegration rate. My patients are very satisfied not to mention it is also very beneficial for dentists.

Our Treatment Line-up

1 Affordable Type Treatment fee



UFII Fixture



Stock Abutment



PFM or PFG

2 Standard Type Treatment fee



UFII Fixture



Customized Abutment



Zirconia

3 Premium Type Treatment fee



UV Active



DIONavi.
Guided Surgery



Customized Abutment



Zirconia