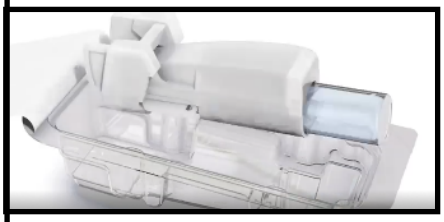
Thommen Medical
3,595 followers
1d •

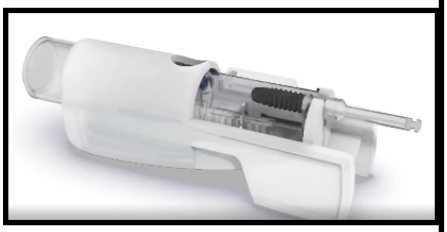
INTEGUARD® Matrix - Did you know?

Only with the APLIQUIQ® conditioning system can you generate the alkaline and superhydrophilic surface INICELL® chairside immediately before implantation.
The conditioning solution is stored separately from the implant in the cartridge. By pressing the cartridge and subsequent vigorous shaking, the implant is covered and activated by the conditioning solution.
The conditioning solution is strongly alkaline, with a pH value over 12. The free hydroxyl ions (OH-), responsible for the high pH value, have an antimicrobial effect. It protects the implant surface from the removal of the product from the sterile packaging until the first blood contact. The high pH is immediately buffered by the blood, and at the same time the superhydrophilic implant surface allows spontaneous and homogeneous protein adsorption, creating the basis for fast and successful osseointegration.

Learn more: https://lnkd.in/d5aTbkR

#INICELL #APLIQUIQ #thommenmedical #wearethommen #drivenbyscience #multiguardprotectionsolution #mps #dentalimplantexperts #dentistry #integuardmatrix #integuard



Gerald Niznick DMD, MSD • You
Dental Implant Pioneer
17h

Can you prove any clinically significant advantage to applying a conditioning solution - if not, it is just a marketing gimmick.

Thommen Medical Author
3,595 followers
2h

Thank you for your comment. Actually, there are multiple clinical studies showing the clinically advantage of the conditioning solution and the INICELL surface. Please refer to the pages 4-7 of this document:

https://www.thommenmedical.com/fileadmin/Media/09_Landing_Pages/Multiguard_Protection_Solution/Thommen_MPS_Brochuere_A4_EN.pdf

Gerald Niznick DMD, MSD • You
Dental Implant Pioneer
13h •••

Like I said show me a study that proves a clinically significant advantage. Ie a side by side blind study placing Thomnen implants with and without conditioning solution and compare the clinical success - osseointegration or not, bone loss or not, stability etc. You can't do it because they will both be so successful that if a difference could be shown, it would not be statistically significant. Yes hydrophilic surfaces may show more BIC in 14 days as did Straumann's SLActive, but that is of no consequence as the implant can be loaded immediately if adequate initial torque is achieved, or if not, loading will be delayed 12 weeks. By then there will be no difference in BIC or stability as shown with SLActive.

"Biologically improved wettability leads to a homogenous adsorption of proteins on the implant surface. This leads to more activated thrombocytes (10) and a homogenous, thicker blood clot network in the early stages of wound healing (11). On the molecular level, MMPs, BMP-2 and VEGF are present in higher concentrations on the INICELL® surface (11, 12), accelerating the osseointegration process.

Thommen Medical Author
3,595 followers
2h •••

First of all you are right, it is very difficult to reach significant differences in this context. Nevertheless, as an implant manufacturer, we aim to provide the best treatment for the patient. As the superhydrophilic effect impacts the very early stages of wound healing and osseointegration, it might decrease early failure rates. This was investigated by LeGac et al., who compared 1337 INICELL to 1581 unconditioned implants in an implantological office setting. 7 INICELL implants (0.5%) and 23 unconditioned implants (1.5%) failed in this study, all early (before implant loading).

Gerald Niznick DMD, MSD • You
Dental Implant Pioneer
13h •••

Thommen Medical
You would have to know how many of each type were placed in the maxilla vs mandible, anterior vs posterior, lengths, health conditions of patients, immediate extraction vs delayed insertions etc to even begin to evaluate whether there a1% difference was statistically significant. Here is a 5 year study of Legacy implants without conditioning and with 100% success. https://issuu.com/dr.niznick/docs/2009_-_100__study?e=0

Thommen Medical Author
3,597 followers

Gerald Niznick DMD, MSD Congratulations on those results! Like you, we aim to provide the best solutions for implant patients. Our aspiration is to better understand the underlying mechanisms of osseointegration, and to provide basic scientific evidence on that topic.

Gerald Niznick DMD, MSD • You
Dental Implant Pioneer

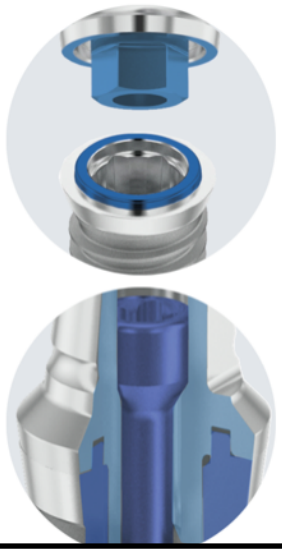
Thank you. I am sure we both "aim to provide the best solutions for implant patients." Clinical results do not differ significantly between 2-stage implants from reputable companies like Thommen and the products I developed that are sold today by Zimmer Biomet (Screw-Vent) and Implant Direct's division of NobelBiocare (Legacy). What I take issue with are the efforts of implant companies, both in the premium and value segments, to create a USP (unique selling proposition) based on the weakest of scientific evidence or misguided claims of simplicity. Different implant surfaces have provided fertile grounds for unsubstantiated claims of faster or more complete osseointegration, often to justify premium pricing. Thommen's APLIQUIQ® conditioning system is sophisticated packaging designed to capitalize on Straumann's successful marketing of its premium priced SLActive surface. Both claim increased surface wet-ability will enhance clinical success without any clinical studies to support such a claim. My USP since Core-Vent in 1982 and Implant Direct in 2004 was on simplicity, versatility, precision and value. Implant Direct is credited with creating the Value Segment of the market that all premium priced companies are now chasing. www.niznick.com

Thommen's internal Hex Connection with a butt joint (flat-to-flat) implan/abutment interface epresents a significant departure from the Internal Hex Conical Connection I first introduced in 1986 with the Screw-Vent Implant, that is used by most implant companies today.

EVERGUARD® Connection

Designed for long-term mechanical stability

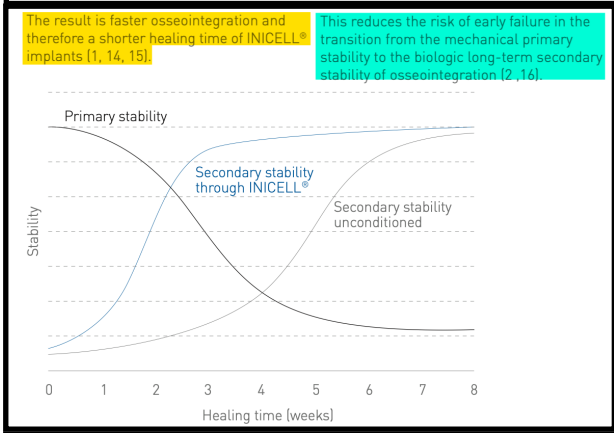
The EVERGUARD® Connection, with an internal hex and external stabilization ring, ensures optimal long-term stability of the implant abutment connection. The connection design includes a vertical stop for consistent abutment position and preservation of the abutment screw's preload to avoid screw loosening. The clever design of the reduced size abutment screw enables thicker implant and abutment walls and protects implant integrity. The reduced screw access channel allows for improved restorative flexibility and aesthetics.

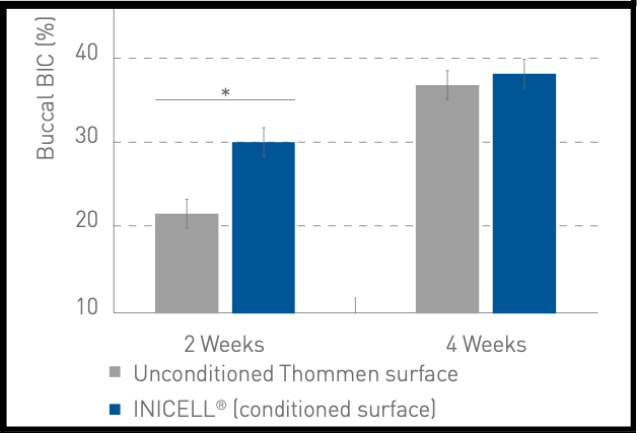


Gerald Niznick DMD, MSD • You
Dental Implant Pioneer

Geralld Niznick DMD, MSD
Thommen Medical.
I was able to open the link you provided and as I expected, it did not contain research that credibly justifies Thommen's claims that its unique packaging process to increase surface wet-ability is the reason for, or even contributes to, the "very low failure rates" that Thommen reports. This is the same type of research that Straumann used to justify the higher cost of its SLActive surface. The Beagle dog study showed 40% more bone-to-implant contact after 2 weeks but by 4 weeks there was no significant difference. From a clinical standpoint this is meaningless. An implant in a patient can be loaded immediately if a high initial torque is achieved or should be allowed to remain unloaded for 10-12 weeks. The graphs projecting over time Primary Mechanical vs Secondary Biological stability is pure speculation. One can not differentiate at 8 weeks how much of the stability is from new bone growth verses the residual mechanical stability. The claim that the conditioned surface "reduces the risk of early failure" is unsubstantiated. The fate of immediately loading an unstable (<30Ncm) implant can not reliably be compensated for by faster bone attachment in the first few weeks.

THOMMEN'S HYDROPHILIC SURFACE CLAIMS:
"One of the primary features of the INTEGUARD Matrix is the surface INICELL which promotes faster osseointegration and results in very low failure rates. "
Thommen's animal study comparing its surfaces shows a 10% differene in stability at Week 2 but by Week 4 there is not a significnt difference.





The result is faster osseointegration and therefore a shorter healing time of INICELLÂ® implants

This reduces the risk of early failure in the transition from the mechanical primary stability to the biologic long-term secondary stability of osseointegration

Thommen Medical Author
3,597 followers

Gerald Niznick DMD, MSD Everyone is entitled to his or her opinion. We have provided the published studies. Now that this chain has had 9 communications, we are done with the back and forth.

Gerald Niznick DMD, MSD • You
Dental Implant Pioneer

Thommen Medical
I am glad that you acknowledge your claims of faster osseointegration and shorter healing time with your Alkaline surface treatment are just your opinion. Shaping opinions is exactly what marketing is all about. Companies create USP (unique selling proposition) like your packaging that included an alkaline solution that, by shaking the package, wets the implant surface just before insertion. Like Straumann, you conducte an animal study to support a claim of faster osseointegration resulting from the application of the “conditioning solution”. that is “strongly alkaline, with a pH value over 12." Dentists need only to dip whatever implant they are using in an alkaline solution of soapy water or sodium bicarbonate to produce a pH of 12. Implants are generally loaded either immediately or after a 10-12 week period so increasing the stability in the period 2-4 weeks following insertion has not been proven to increase clinical success. A part of marketing of dental implants has long been about making exaggerated claimed, supported by “science” to justify high prices. I have been dealing with this since 1984 with NobelBiocare. This is well documented in the controversies section of www.niznick.com

STRAUMANN’S HYDROPHILIC SURFACE CLAIMS:
“Safer and faster treatment in 3-4 weeks; Reduced healing times… to 3-4 weeks; Increased treatment predictabiliity in critical protocols”
Straumann’s animal studies comparing SLA to SLActive surfaces show similar results to Thommen’s: Small increase in stability at week 2-4 with no difference by week 6.