

The Dramatic Return of Dr. Niznick

By Walter Eisner (posted August 15, 2006)

The Dramatic Return of Dr. Niznick—Like Napoleon returning from Elba to reclaim Europe, Dr. Gerald Niznick, the father of modern dental implants, is roaring out of retirement to challenge market leaders Zimmer, Biomet, Nobel and Straumann in this billion dollar market.Who will rule?

We'll be honest. This was going to be a very pedestrian article about the dental implant industry. But then we discovered that we are in an extraordinary time in the industry. One of the founding luminaries of the industry, who had been banished like Napoleon to Elba (ok, Los Angeles) under a non-compete agreement, has returned. That agreement has expired and, like Napoleon, he is marching back to reclaim a new leadership role. But before we get to that, let's look at the current landscape.

The Dental Implant Market

A recent Millennium Research report says that the dental implant and final abutment market in the U.S. will experience a compound annual growth rate of about 20% to generate more than \$900 million in revenues by 2009. Globally, the current market for dental implants is estimated to be more than \$1 billion and more than \$400 million in the U.S., with the category expected to grow at 10% to 15% annually. In 2003, more than 700,000 dental implant procedures were estimated to have been performed by oral surgeons and other dental professionals in the U.S. and more than 1.3 million procedures in Europe.

One of the most important developments in modern dentistry has been permanent tooth replacement with dental implants. Dental implants are titanium replacements for dental roots, which when implanted in a patient's jawbone integrate with the jawbone through the process of osseointegration, providing a permanent replacement for the natural tooth root.

In addition, bone grafting and regeneration techniques have radically expanded the possibilities for implant-based restorative dentistry. These techniques are making it possible to expand the candidate pool for implants to include a sizable population of edentulous patients who were poor candidates for dental implantation due to severe bone resorption. With a rapidly aging population trend in the developed world and the resulting enormous unmet need for replacement teeth, a large number of companies see the opportunity to move into these sophisticated dental techniques.

Industry Leaders

The industry is dominated by two large European companies (Nobel Biocare Holding AB Group and Straumann Holding AG) that control approximately 57% of the worldwide market, and two U.S. companies (Biomet and Zimmer) that control approximately 22% of the worldwide market. Biomet bought 3i, a dental implant company, in 1999 and Zimmer acquired Centerpulse in 2003.

Straumann Holding develops, manufactures and markets implants, instruments and tissue regeneration products for the use of tooth replacement and the prevention of tooth loss. Products include implants and prosthetic components that connect the implant with the visible crown of the replacement tooth. These are also complemented by a range of matching precision instruments and tools. The company is headquartered in Basle, Switzerland.

Nobel Biocare Holding is a Swedish medical devices company. Nobel provides dental implants, customized dental prosthetics and complete sets of restorative components for lost teeth. Core products include Replace Select Tapered, a dental implant that can be used for both one- and two-stage surgery; Replace Select Straight, a dental implant that has a parallel-wall, self-tapping design suitable for all bone types and shapes; Branemark System, an implant system designed for all types of aesthetic treatments, and Procera Piccolo, an aesthetic solution for small and medium-sized dental labs. It also offers a range of abutments. During 2004, Nobel launched NobelDirect, a biologic one-piece implant; NobelRondo, dental ceramic for crowns and bridges; Procera Bridge Zirconia and Procera Forte Scanner. The company has sales organizations in 29 countries worldwide, and production sites in Sweden and the U.S. Nobel and Straumann's stocks' performances, according to a Barron's article by Vito Racanelli in 2005, had investors grinning last year as their stocks were up more than 140% since early 2003.

The Niznick Factor - Factory Direct Prices Over the Internet

The big four of dental implants have been carving up the market by themselves. Until now. Gerald Niznick, DMD, MSD, is recognized by some as the father of modern American implant dentistry. In the early 1970's, Dr. Niznick began a decade-long search for a reliable dental implant and by 1982 had developed and patented his own dental implant design and established Core-Vent/Paragon Implant Corporation. By 1990, the Core-Vent System was the most widely used dental implant system in the world. By the end of the 1990's, Dr. Niznick held 20 U.S. patents including the internal connection patent that has become the cornerstone of modern implants and is licensed to 9 other dental implant companies

Dr. Niznick retired in 2001 from the dental implant industry, selling his business to Sulzer Medica, a Swiss company, subsequently called Centerpulse and acquired by Zimmer Holdings in 2003. As part of that sale to Sulzer/Centerpulse/Zimmer, Dr. Niznick agreed to a non-compete agreement until January 8, 2006.

Now he's back and has formed Implant Direct, LLC to sell a new implant product line directly from his factory to dentists over the Internet at greatly reduced prices compared to the big four. Dr. Niznick formed his new company in early 2004 and for the past two years has been designing and manufacturing the new line of implants named the Spectra-System™. The company has filed for 510k FDA pre-market approval to sell a complete line of abutments to Zimmer Dental's popular Screw-Vent™ implant, invented by Niznick in 1986 and improved in 1998 with the tapered version.

Niznick is also CEO and majority shareholder of Tactile Technologies in Israel, which creates devices and software for Image Guided Placement of Dental Implants. The goal of that software is to allow dentists to utilize pre-manufactured abutments from Implant Direct and other companies to reduce the expense of CAD and custom cast abutments.

Niznick – Uncensored and Raw

On his web site Dr. Niznick quotes from a June 6, 2006, Osseonews.com blog where he wrote that "The major implant companies have made only minor modifications to their product lines in recent years, primarily to differentiate from the competitors' products and to justify price increases. These price increases bear little relationship to increased cost of goods, which has gone down from 20% to 17% for both Nobel BioCare and Straumann over the last few years as a percentage of gross sales while profits have risen to 30%. The major implant companies operate on the historic economic reality that raising prices generates added income that in turn can be used to expand sales forces and buy greater influence with opinion leaders, universities and implant organizations. Nobel recently committed \$5 million to the University of British Columbia, Canada, and another \$3 million collectively to two other universities."

He continues, "The smaller companies, who sell products for more reasonable prices, lack the technical resources to produce a broad, high quality product line and the financial resources to produce adequate inventories or conduct extensive marketing to establish a significant customer base."

"None of the major implant companies' prices compete with each other. Instead, they focus on what features differentiate their products from the competition, and claim that that must be key to their high success rate, whether it be in a poor quality bone, immediate or early loading, or in the hands of GPs placing their first implants. The features they point to include TiUnite surface (Nobel - the same company that hyped the machined surface CP implant for 15+ years), new wet surface (Straumann—who hyped TPS and then SLA surfaces as the be-all and end-all of surfaces), Micro-threads and an "Osseospeed" fluoride treated surface (Astra—known for years as the only company blasting with Titanium), platform switching on a connection that clicks (3i— no longer talks about the acid etched Osseotite implant having a 3mm machined neck because they abandoned that when Nobel extended its rough surface to the top), or the company selling the original Internal Connection with Friction-Fit Abutments (Zimmer Screw-Vent)."

"There are a host of smaller companies (BioHorizons, Innova, Friadent, Bio-Lock etc.) who differentiate on threads, beads, laser lines or some other gimmicky feature, as well as being priced below the major companies. Eventually these medium-priced companies build a customer base and then start to raise their prices so they can market with the big boys with symposiums, salespeople, etc. There are smaller companies that market on price alone and try to be similar enough to the major companies' products that you do not have to think too much about their research history, not that research matters any more when Nobel's idea of research now consists of having three studies under way. The small companies selling at \$100-\$150 can't afford to offer broad product lines and can't afford to maintain adequate inventory levels to supply their customers. Quality is also a question if they are not making their own implants."

An Industry Paradigm Shift?

And there is where Dr. Niznick sees the new opportunity for his business and his chance to get back to the top. He writes that his is a "new company with the design and manufacturing experience as well as the capital to challenge the major implant companies, potentially creating a price point shift in the implant industry. What could really represent a paradigm shift in the implant industry—Application Specific Implants sold on the Internet at factory direct prices. When you challenge the major companies on innovation and value, you better be able to make a high quality product because the multi-billion dollar companies will be looking for any way to be critical in order to compete without actually lowering prices."

A dental implant procedure runs roughly \$2,000-\$3,500, with much of that for the actual procedure. Of the total, the implant itself—sold to the dentist by Straumann, Nobel, Zimmer and others, usually runs \$400 to \$500. Niznick is advertising them for a price of \$150 and will target high volume users. In the Barron's article quoted above, Straumann CEO Gilbert Achermann says that, "Dr. Niznick is a formidable doctor and businessman, but only a narrow customer segment will be attracted to his business model."

In an *osseonews.com* interview recently, Dr. Niznick says that, "designing a 'clean sheet' system with no old parts or marketing positions to lock me in was a great experience. It gave me the opportunity to approach implant development from a different standpoint. I call it Application Specific Implants, where each implant has a specific clinical application and each implant includes a prosthetic abutment for that application. All six of my implants will be able to be inserted with the same set of drills making it truly universal. With the move towards one-stage surgery and immediate loading, three of the six implants are one-piece implants for various prosthetic and clinical situations, saving the dentist the cost of having to buy additional components. The two-piece implants are all provided in fixture mounts that can be modified to be a final abutment also."

The Zimmer Defense Line

Zimmer has not sat by idly as Niznick lands on the beaches and begins his march to regain market share. In February 2005, Zimmer Dental instituted a binding arbitration claim based on its contention that any preparation to compete by Dr. Niznick, prior to the expiration of the non-compete agreement on January 8, 2006, was a violation of their original Asset Purchase Agreement. According to the Niznick's web site, the arbitrator's award rejected Zimmer's demand that the sale of Dr. Niznick's new products be delayed an additional 18 months.

The beach defenses fell and the good doctor marched on.

Niznick is also free to compete with Zimmer after January 9, 2006, through lawful advertising that compares his products or services with those of other implant manufacturers, including Zimmer. Zimmer is not allowed to make the claim in its advertising or other corporate materials that Zimmer is the originator, inventor or developer of dental implant innovations that were in fact originated, invented or developed by Niznick. Niznick was restricted on future solicitation of Zimmer employees and donations of implants to one particular university.

Zimmer had a small victory. Niznick was enjoined from disparaging Zimmer until June 30, 2007. We want to be at the cocktail party on the evening of June 29, 2007, when the clock strikes midnight.

This corner of the orthopedics industry promises to generate substantial competition in the future and Dr. Niznick's new web-based business model giving dental professionals more control over their own means of production may portend a paradigm shift for the entire industry.

More to come.