Biolase could become the next Intuitive Surgical
An interview with the company’s CEO Federico Pignatelli

That is not exactly true. Since the introduction of WaterLase technology 15 years ago, we have sold over 10,000 units worldwide, 6,000 of which were in the USA alone. The main challenge however is education. Dentists need to be better educated about the treatment and cutting of soft tissue, which is something a dental drill cannot do. These additional options mean that dentists no longer need to refer patients to a specialist for these tasks, thereby boosting revenue in the practice.


“In contrast with other market-leading systems or technologies, such as Sirona’s CEREC, WaterLase is protected by over 100 patents, which will allow us to protect our competitive advantage. The adoption cycle of new technologies is growing increasingly shorter and more advanced technologies like WaterLase will rapidly find their way into dental practices. Dentists that do not upgrade their practices will likely begin to lose patients, become uncompetitive and lag behind. You cannot fight technology; you cannot fight innovation. If you do, you are doomed to be left out of the market.”

Federico Pignatelli

In a recent statement, US-based provider of dental and medical lasers BIOLASE announced that it has sold Camber Capital Management in Boston in the USA has purchased US$5 million of the company’s common stock. DTI had the opportunity to speak with CEO Federico Pignatelli about what this means for the company, the patients and the reasons that the company’s WaterLase technology has the potential to revolutionise dental surgery.

DTE: Mr Pignatelli, your company seems to have been struggling recently, according to some analysts. What is your company’s position right now, and what does the recent sale of shares to Camber Capital mean for your business?

Federico Pignatelli: The conflagration arises from the fact that we grew 40 to 50 per cent a year for two years and in 2015 our growth has slowed down to “only” 15 to 20 per cent. We believe that BIOLASE will grow strongly in the years to come. We just needed to raise our capital with a few million dollars in order to improve our balance sheet. This capital raise, combined with our US$8 million Comerica Bank credit line, will give us enough capital to continue our plan of business expansion.

Also, as we approach the fourth quarter we see net income and positive cash flow returning and we are expecting this positive development to continue in 2014. So we feel very positively about where BIOLASE is right now.

So have the recent restructuring measures paid off?

Yes, they have paid off handsomely, but there is more to do. We admit that in the past there have been some unhappy customers, but in our defence the company back then was managed by entirely different people and was locked into an exclusive global distribution agreement with Henry Schein. In the new BIOLASE, customers are the number one priority and we do what it takes to take care of them.

What people need to realise is that BIOLASE is a cutting-edge technology company with a new technology that is potentially going to radically transform the way dental surgery is performed and practiced. As a new step in informing the marketplace about WaterLase, we have recently embarked on a social media and press campaign to reach out to millions of patients to educate them about the many advantages of being treated with BIOLASE’s technology.

We are glad to have Dr Fred Moll, the co-founder of Intuitive Surgical, who values our technology such that he joined our board of directors recently. He is a legend in the medical field because with his company he transformed the way surgery is approached through the use of robotics. Thanks to a visionary like him, today tens of thousands of patients with cancer can be treated in a much more precise way than ever before.

We believe BIOLASE has a technology that is so advanced and revolutionary that the company could become the next Intuitive Surgical. That is because with WaterLase technology we can transform surgical dentistry for hundreds of thousands of dental practices around the world, while providing better and safer care for patients.

Why do you think lasers and particularly WaterLase will be the technology of choice in dentistry for the future?

If you think about it, dentistry has not really changed very much since the dental drill was invented by the Egyptians 7,000 years ago. The principle of removing tissue by mechanical rotation has remained the same since that time, with the only major change in the past 70 years being the attachment of a high-speed engine. With WaterLase technology, we are able to make use of the most basic element of human tissue, water. The human body in its entirety consists of 60 per cent water, so water can be found in almost all tissue. Dentine, for example, has 20 per cent water in it. By energizing water molecules with a laser, tissue can be cut without pain, heat, abrasion, vibration, or the risk of microfractures. At the same time, it is also much more precise. Clinically, this is much better dentistry.

Furthermore, there is no need for an anaesthetic for the patient: 99 per cent of patients can be treated without using Novocaine. How wonderful is that? On top of that, laser energy kills bacteria, viruses and fungus, and that provides another advantage for dentists, since it is almost impossible and certainly very costly to have surgical instrumentation like dental bars and endodontic files fully sterilised, and too costly to use new instrumentation for every patient to be treated.

With all these advantages, why does it seem that the technology has not been adopted widely by dentists yet?

We regularly ask patients whether they would like to be treated by a conventional dentist or high-tech dentist, and almost 100 per cent of patients would like to be treated by a high-tech dentist. Therefore, we believe that WaterLase will be part of most dental practices in the near future.

Thank you very much for the interview.