

CREDENTIALS - HOW TO ACHIEVE A VISION



ENTREPRENEURIAL INVESTMENTS PART I

Prepared for: Dr. Fariba Hashemi

Prepared by: Jean SCHMITT, Viktor CHARPENTIER, Emil MARTENSSON, Maximilian ZELLER, Cristiana PASSIU, Yuanyuan HU, Tobias KULL, Joran SAVENIJE

April 27, 2018

CREDENTIALS STORY

“I don’t like big companies” is what Dominik Lysek used to say. He certainly lived up to those words, having kept his start-up Credentis a quite lean undertaking even until today, 8 years after its creation in 2010. With 6 employees, all dedicated and showing full commitment to the small firm, the product portfolio was still of a manageable size. Yet he seemed to have a vision of one day having his ‘baby’, the name most entrepreneurs use to refer to their creation, being acquired by a major player in the market. An exit of that kind would definitely challenge his position as Credentis leader, however, with a comfortable financial compensation enabling him to take on new ventures he would accept. This scenario however is still a future dream as today, Lysek first has to convince the Venture Capitalists at VentureDent to invest the substantial amount of CHF 20m in a spin-off of his company. Without the commitment of some affluent venture capital firm as the latter, his dream of the perfect exit strategy would remain a dream.

It all started back in 2007, when all of a sudden, young Dominik Lysek, at that point Clinical Research Director at Geistlich Pharma, Switzerland, was approached with a technology that the inventors were trying to pitch to some reasonable partner. Back then, strategic decisions were taken against the adoption of the technology, which despite its promising results did not fit into the Geistlich portfolio.

Lysek, two years later watching out for new challenges was still fascinated by this technology, which fitted so well into the area of interest, which his heart was beating for.

Without further ado, he travelled to Leeds, the place where Curolox had been developed. He was full of energy and eager to move something. Only little after, Credentis had been founded.

“It is not the size of the advertising budget but the size of your scientific and publication portfolio that counts for success.”

Credentis is a company that was first dedicated to develop a product for the dental professional market – the market that directly addresses dentists and dental hygienists. Major competitors, like 3M, Ivoclar or Vivadent, already had a strong footing with their clients. Compared to the consumer market though, where companies like GSK or Colgate hail, it is not

CREDENTIALS STORY

the size of the advertising budget but the size of your scientific and publication portfolio that counts for success. For Credentis, being a small and comparably capital poor firm, this was the big advantage of the professional market. Also, scientific models can be designed as to reveal the full potential of the technology – in this case Credentis' patented Curolox technology – while at the same time concealing potential weaknesses that one may have. In other words, you can almost guarantee to show the results you want to show. Be that as it may, the technology they were sitting on would not require any clever tricks to show measurable advantage over the mainly fluoride based competition. Credentis, as a consequence, achieved to create a meaningful story around its products and hence could claim quite a reputation for their quality in the professional dental market after only little time.

Their products in the professional segment were all making use of the same patented technology, based on the peptide called “P11-4”, a molecule that when applied on the teeth acts biomimetically, forming a scaffold on which the tooth mineral is reformed. This technology can be applied to cure early caries: through application onto demineralized spots on the tooth or caries lesions helps to capture calcium and phosphate ions, resulting in the regeneration of the natural enamel. Similar to what happens with natural proteins during the growth period of the teeth. Other applications include the teeth protection through the formation of a topic mineral layer and the teeth desensitization. “Each product does use the technology a bit differently and therefore results in its own desired effects”, Lysek pointed out – an indication of the high level of elaboration and complexity within the Credentis product portfolio.

Curodont Repair was the first product launched by Credentis in 2011. It is used for application on incipient caries. Not only was it intended to prevent the lesion from progressing, but to regenerate enamel. It helps preserving a tooth without the need of invasive therapy. Such results cannot be obtained with the established fluoride-based products, since fluoride cannot help regenerating the tooth mineral in-depth in caries lesions.[1]

The second product, Curodont Protect, entered into market 2013. It aims at establishing a protective mineral layer on the tooth and hence provides an effective and long lasting protection against acid attacks. It is particularly designed for the use after professional dental cleaning or bleaching, the latter being a substantial market opportunity.

CREDENTIALS STORY

Last but not least, Curodont D'Senz, was released in 2014. It is a gel that significantly reduces tooth sensitivity in case of physical or thermal stimuli on the teeth. This is explained by its

“Caries is one of the world’s most prevalent chronic diseases.”

efficiency in occluding open tubuli in the teeth.

Although Credentis was able to build up its reputation within little time and with a product line that prevents caries, one of the world’s most prevalent chronic diseases,[2] at first sales did not develop as they had visioned. The problem would turn out to be lacking interest from the distributors to push for sales of Curodont products. Given that other products sold for higher margins made them higher priority to the distributors. But of course Lysek could not be put off – he kept searching for the right distribution strategy and entered into a partnership with a listed dental company that would sell Credentis’ products as private label worldwide with a dedicated sales force – a great success for Credentis’ professional branch, but nevertheless revealing one of the biggest weaknesses of the company: the penetration of markets out of its own resources. In other words, the dependence on strong partners.

Concerning the professional branch, the investment into Credentis could be considered as safe by now. Despite still not distributing dividends to early investors, initial investments had sufficed to grow the company to an extent where investors seemed satisfied and the company basically cash flow neutral. The main burdens had been overcome. The only question was, how much further Credentis would be able to penetrate the market before other big players started to put more focus on the growing field of therapeutica within dentistry.

Lysek, at the same time, didn’t seem to be fully satisfied. It seemed, he wanted to grasp the opportunity to do something bigger – take a step that would really pay off for the long 8 years during which he had been dedicating his time to his company.

“In 2009”, he pointed out, “a company called NovaMin Technology all of a sudden became a broadly discussed topic in the field of preventative oral care.” They had developed a

CREDENTIS STORY

technology, based on a bioglass, which was clinically proven to relieve tooth sensitivity.[3] The company itself was still quite small, with a turnover of around \$500,000 at that time. This would not be a problem as it was the technology that attracted the attention of a big toothpaste player. They achieved to make a pretty big deal out of it: In December 2009, NovaMin Technology was sold to Sensodyne/GSK for 130m\$, an incredible 260-fold size of the turnover! How was that possible? One potential explanation for the high valuation is that the acquisition plain and simple allowed Sensodyne to roll out an additional story around tooth sensitivity and help them to build up their position as a market leader in the sensitivity segment. A position which they were willing to pay for.

A similar exit for Credentis would return way more than just a payback for the initial investment. But how could such a buyup be put in motion? How would Credentis attract attention of huge players? His plan: Generate it through positioning and proving their attractiveness in the over-the-counter (OTC) business.

Despite promising technology and a compelling story, Credentis' OTC business had since the early days of the company played a subordinate role in the small organization. It required painful lessons from the professional market to widen the company's focus: dentists displayed something that could best be described as knowledge inertia. There was a reluctance to adapt Credentis new technology, considering fluoride had hailed as lone king of the throne for over 50 years. First efforts to market Curodont Repair utterly failed. It was only in 2015, when Credentis began to enter into technology partnerships with more influential toothpaste and oral care brands, still Switzerland only, that they entered the OTC market. Amongst others, Credentis managed to partner up with Candida, a private label brand of Migros, Switzerland's largest retailer, which assured them at least a steady turnover in the OTC branch. Candida gets to use the Curolox brand and peptide in their toothpaste, marketed as Candida Protect Professional, and sell it in their retail stores. The margins, on the other hand, are not as high with this model as Credentis is only getting royalty fees in the single digit range. Nevertheless, with market research showing that the consumers of OTC oral healthcare are highly interested and willing to spend on products that help relieve tooth sensitivity, Credentis was equipped with the right technology.

CREDENTIS STORY

In late 2017, still with his bigger picture in mind, Lysek approached Stuart Ledgerwood, a retired dentist, one of the many angel investors staked in Credentis, and most importantly, close friend to Lysek. It was time for Lysek's plan to be set in motion.

"How about we spin off our OTC business and have it financed by a VC firm?"

Lysek, who previously had been extremely skeptical about having VC's onboard knew exactly which amount (lots) of financial resources it would require to set up a proper customer brand – bearing in mind not only fierce competition against consumer good giants but also new business opportunities that were to be looked for not only in Switzerland or Europe but probably in major markets like the US or China.

He kept explaining his plan. "We just split the existing business into two, leave the investor structure of today's Credentis as it is and raise new money for OTCredentis", as he liked to call the new venture with a grin on his face. "This would minimize risk for the current investors while still keeping quite the upside potential if the plan works out.

Ledgerwood, being invested in Credentis with parts of his savings, which he had accumulated as a successful dentist, liked the idea of minimizing risk for him as an angel as he still was waiting for Credentis to become profitable. And yet, he could not imagine, how to achieve successful Credentis OTC business: "How would you go about this? You've seen how difficult the consumer market is, haven't you? And you have only tried in Switzerland. It's not going to get any easier!" Stuart Ledgerwood started to worry as he put out the question that Lysek had just been waiting to respond.

Backed with a pile of market research papers on the US and Chinese oral health care markets, he started to elaborate on his ambitious plans and options they'd be able to go for:

"The simplest of all options would definitely be to partner up with other toothpaste brands. This would already simplify the topic of regulation and would allow best to deal with the great market inhomogeneities in countries like the US or China." Besides that, particularly the issue of intellectual property protection in China seemed to give Lysek quite a headache. "But even if we managed to overcome these burdens, it would still cost millions to position ourselves

CREDENTIALS STORY

among the most dominant brands. So if we want to differentiate ourselves through toothpaste, we better watch out for a partner that is in the business already.”

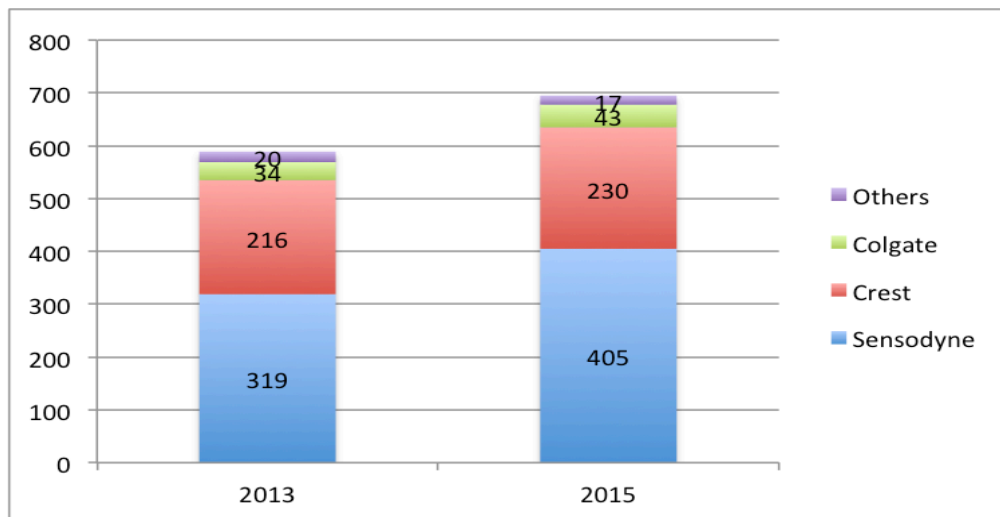
Although technology partnerships with the biggest players in the market were most desirable and lucrative for Credentis, they seemed rather unlikely given the fact that they themselves had already incorporated similar technologies into their toothpastes. Lysek however, being convinced of the superiority of Curolox, thought a technology partnership with second-tier brands could make sense as with joint forces it might allow them to pinch growth from Sensodyne and other giants in the sensitivity toothpaste segment, the latter having experienced a plus in sales of 14% between 2013 and 2015.

Lysek hoped that with this strategy of attracting the highest amount of attention possible by putting pressure on one of the incumbents’ most profitable fields of growth could be reason enough to buy back the growth through the acquisition of Credentis’ OTC branch.

As Stuart Ledgerwood was flicking through the pile with the American market data he came across the sheet that Lysek seemed to be referring to:

Figure 1: Absolute US market share [in m\$] of major toothpaste manufacturers - sensitivity segment

“So what you’re saying is that you want to make all the effort related to market entry just in



order to partner up with peers that don’t even have 2.5% of total market all together?” Bearing in mind the royalty revenue model for the technology partnership, even if Credentis had

CREDENTIS STORY

managed to reach out to half of the remaining players' business, this would result in an extra turnover of around \$400k-\$500k - similar to what Novamin had in sales shortly before they were acquired by GSK/Sensodyne but probably neither enough for Lysek nor for the VCs that he would have to convince of such a step to receive necessary funding.

"Does it necessarily need to be toothpaste", Ledgerwood thought out loud. And indeed he hit the nerve of the discussion. Did it really need to be such a settled business with such dominant players and with really not much to gain? Hadn't it been the great variety of applications which made Curolox such a unique product?

"What about whitening", Ledgerwood came out with as he glanced over to the corner in Lysek's office where all of Credentis' products were laid out. And indeed, Credentis had developed a product which they marketed to have not a whitening but a brightening effect. "Similar to other Credentis products it aims at forming a thin layer of peptides and minerals around the tooth, which then reflects light in a way as to make teeth appear brighter", Lysek explained. Also, he pointed out, that it was a product to be used rather in Europe than in the US, as this technology would not deliver on the whitening expectations of Americans. However, also for the US customers, Lysek seemed to have something in mind: "How about we sell regular bleaching as private label from a third party, package it together with Curodont D'Senz and sensitivity-relieving chewing gum with Curolox technology and marketing the whole as sensitive whitening?" Tooth sensitivity being a major issue to be overcome after bleaching procedures, Lysek was convinced, this could be the breakthrough he had hoped for. Further, in order to prevent lengthy and difficult process of finding the right distribution partners while at the same time assuring higher margins, the products could be packaged in a way as to fit straight into a letter box. This would allow direct distribution in addition to direct marketing via social media - the most cost-effective combination to bring a new product to the consumer.

Stuart Ledgerwood, experienced dentist in retirement, gave the impression of being convinced. Although he had never been a great advocate for bleaching for the exact reason of tooth sensitivity, he could get used to being part of a company that was trying to go about this issue. And as bleaching was facing worldwide growth of roughly 5% he did not refuse to be

CREDENTIALS STORY

financially involved either. The major part of the funding however had to be committed by a VC firm, Lysek and Ledgerwood agreed. The latter was still to be identified.

Originally from the Scottish Highlands, Stuart Ledgerwood came to Munich after he had received his diploma as a dentist at the university of Edinburgh. Having been able to establish himself as one of the most recognized dentists in the southern German region, it was not much of a surprise that when he reduced his work quota, VC firms in the field of healthcare would start to fight to get him and his experience on their board.

The firm to win the trick: VentureDent, a Munich based VC company that amongst others had its main focus on the niche of innovative dental ventures, a field for which they could not have found someone even more experienced than the iconic Stuart Ledgerwood.

When Ledgerwood first invested into Credentis in the wake of their first financing rounds, he still did not sit on VentureDent's Board. However, when he was now thinking about further and more substantial funding for the company, that meanwhile had definitely taken a place in his heart, there was basically no other serious option for him than setting the stage for Dominik Lysek and his ambitious plans.

After in depth elaboration by the founder himself to the investment committee on Credentis and the path it had been following for almost a decade until then, the day had arrived, where Lysek was finally getting ready for his pitch: he was going to present his approach with the corresponding projected sales to the investment committee.

He had left home early so he could go for a walk to structure his thoughts and arguments. He really believed in Credentis' technology and he knew as well the VCs were aware of the scientific proof and the medical benefits of the product. Yet at the same time he also knew the VCs were going to be hesitant due to the low market adoption of the recent years. The VCs focused very much on the potential market and had so far given Lysek a difficult time with their critical attitude. Lysek on the other hand was still fully convinced: He was going to get customers want to buy his products.

By now Lysek had reached the VentureDent offices and felt ready for the meeting that might once again change his life. He was just waiting for the investment committee, including his good friend Stuart to be done with their preparatory discussion. What would they decide? What would you recommend them to do? Should they invest in Lysek and trust, his perseverance will make Credentis succeed? Should they keep their focus on market and their expected ROI? Or should they take another approach?

References

- [1] Schlee, M., Schad, T., Koch, J.H., Cattin, P.C., Rathe, F., «Clinical performance of self-assembling peptide P11-4 in the treatment of initial proximal carious lesions: A practice-based case series», *J Invest Clin Dent* (2017)
- [2] Silvertown, J., Wong, B.P.Y., Sivagurunathan, K.S., Abrams, S.H., Kirkham, J., Amaechi, B.T., «Remineralization of natural early caries lesions in vitro by P11-4 monitored with photothermal radiometry and luminescence.», *J Invest Clin Dent* (2017)
- [3] Bakry, A.S., Takahashi, H., Otsuki, M., Tagami, J., «Evaluation of new treatment for incipient enamel demineralization using 45S5.», *Dental Materials* (2014)

Facts other than the ones officially quoted are drawn from a personal conversation with Dr. Dominik Lysek, Founder and CEO of Credentis.

Stuart Ledgerwood and VentureDent are fictional elements that were introduced to represent the investor side of Credentis.