

Movers & Shakers Interview with David Picard, Chief Executive Officer, Moleac**Date Published:** 19 Jun 2007

David co-founded Moleac and is serving as CEO since. Prior to founding Moleac, David has spent ten years at The Boston Consulting Group (BCG) where he was a member of the worldwide Health Care Practice Area. He has worked both in Europe and in Asia.

David graduated from the two top engineering schools in France, Ecole Polytechnique and Ecole Nationale Supérieure des Mines de Paris, where he majored in mathematics and economics. David also holds a French degree ("DESS") in business law.



David Picard

David (David Picard): Let me give you a minute's introduction... we are very disruptive.

The pharma industry invests on average over 800 millions dollars per drug approved, with mixed success. The costs per new drug continue to inflate and the outcome consists mainly of incremental innovation.

At the same time, there are a large number of medicines which have passed the test of time and are safe and effective, i.e. have a lot to offer to patients. Why invest hundreds of millions in a risky drug development involving biology research, rodent and then larger animal models and then only large human clinical trials, when actually you already have therapeutics which are validated by

human usage for safety and efficacy.

When one looks at Traditional Chinese Medicine (TCM), one witnesses two worlds facing off with each other – an 'educated skepticism' of the Western Medicine whose practitioners look at TCM and say "not invented here, not explained in my own framework" on one side and on the other side, the uncritical enthusiasm of the sufferers expecting a magic cure to their illness. Of course not all TCM is based on solid evidence, and one needs to look at the hard facts of its clinical safety and efficacy when selecting products.

Now, I think we've shown it's possible to actually apply what is core in the Western framework to traditional medicine: hard facts, hard clinical data, established safety and efficacy. You can take TCM successfully into mainstream medicine for the benefits of patients.

This route provides a fast route into developing new cures for patients. First, it does not take 12 years, nor does it take multi hundred million dollars, it's a new way to accelerate innovation ...few others have succeeded as we've done with Neuroaid within 2 years, continuing to build up data with single digit million dollars investment. Compared to other drugs, that's a fantastic equation, both for the patient and from a business standpoint.

The model that we are pioneering enables us to play in the pharmaceutical field, with the pharmaceutical dynamics in terms of product, solution to patients, impact on people's lives while having cost structure that is closer to Phase IV development – human clinical trials. This model triggers growing interest from the pharmaceutical world - "you can sell it at drug price; it hasn't cost you a tenth of the price pharmaceutical drugs are developed at. There must be something there we can look at". Seen from the functional food industry, TCM is also potentially a tremendous source of growth, you can identify a new source of food supplement. Coca Cola was engineered by a pharmacist in the U.S., whereas Wang Lao Ji, the cooling tea drink which

originates from a TCM, is overtaking many Cola brands in China.

F&S (Frost & Sullivan): Could you please share with us some of the key milestones that the company has crossed since being set up in Singapore in 2003?

David: The first was to get a number of high level people interested – Nobel Laureates, academicians, leading clinicians– and as they all proved to be passionate, this created a fantastic network for us to access opportunity and key people to advise us on developing the concept of tapping on TCM. This was our first milestone and this was really the foundation of the company.

After this, we started screening over 200 products for their potential in bridging gaps in Western medicine. Selecting Neuroaid as our first product was our second milestone: both as our first product and as the first bridge we were building between the two medicines. It was the beginning of an exciting process: after coming across several products that we liked, we spent quite a lot of time analysing Neuroaid before making a decision. We had to look in depth into the existing data, overcome some of the barriers between TCM and Western medicine. There was an important trust factor with our Chinese counterparts; we did work hand in hand to go through the data, the plan and the ambition. We got the interest of key opinion leaders such as Professor M G Bousser who came in person and did the due diligence in China. Assembling this platform of experts on almost three continents to build this bridge has been a very exciting moment.

The other milestones for Neuroaid - signature of the licensing agreement for us to develop it outside of China, the creation of CHIMES society, a non profit society in Singapore which aims to study the clinical efficacy of Neuroaid in the early phase of stroke, regulatory approvals country by country, patients calls asking for Neuroaid locally or to be shipped to them abroad, feedback from the first patients, these are milestones.

F&S: Could you tell us about the challenges Moleac has faced and overcome in its success so far?

David: Let me talk first about the chances we have had. Our biggest chance has been to be in Singapore as here we find the best of two worlds. On one end we have access to world class clinicians and hospitals, which are highly respected in the international community, to implement our clinical research. On the other end we have the chance to have a scientific community and health authorities which understand TCM well. Altogether this is a fantastic enabler which allows us to accelerate on bringing products unveiled from Traditional Chinese Medicine into the West with excellent recognition.

As with any disruptive endeavour, we also have to face a number of challenges which have mainly to do with the 'not invented here' syndromes.

The medical community needs to be educated and brought into what we do. While most Western doctors agree that the key is high quality clinical data on safety and efficacy, their instinct is to rely on hypotheses of mechanism of actions. With Neuroaid having established safety through clinical trials and half a million patients treated to date and an excellent promise of efficacy obtained in the Chinese clinical trials, the mechanism of actions is yet to be deciphered. And we need to remind the doctors that they often prescribe the drugs Lithium or Phenytoin despite not having clear knowledge of the mechanism of action, but which have shown to be beneficial to patients. With time and persuasion, most doctors will end up agreeing that Neuroaid is the best choice for stroke patients in their recovery phase, as it is safe and addresses a complete gap in Western medicine.

Some competition still comes from traditional or complementary medicine doctors. In Asia they make a considerable profit by mixing their own herbs and this is where they derive most of their revenues. Hence many are reluctant to go for Neuroaid, and try to convince their patients of their own cheaper alternative. We are not overly worried about such competition because as technology advances, consumers become more educated and receptive towards proven medicines backed by solid data.

Similarly, as a venture company, we don't really fit into one model. We're a bit odd for a

pharmaceutical or biotech company. Biotech venture capitalists typically like to look at molecules, and invest in a succession of clinical trials with an overall probability of success of 10% or less. Those in the industry of consumer goods concentrate on product branding. We are somewhere in between – we are defining our own space and that is also a challenge. It takes a lot of audacity, perseverance and preaching! We're bringing what patients desperately need, in a fast and cost effective way and we're proud of that!

F&S: How do you define your competitive environment?

David: It's difficult to define because of the innovative business model we adopt. We can look at competition in the market and at competition in sourcing new products.

We've looked at several hundreds of products and we have secured licensing rights for 14 of them. We hope to have a competitive edge for each of our products, just as for Neuroaid, where we focus on a therapeutic gap. Therefore, there is little or no competition in the market and there is high growth potential. For this kind of competitive edge to prevail, we always adhere to our screening rule – does the product fill a therapeutic gap? I am not going head to head with Lipitor or Celebrex with a new complex herbal formulation, where there is no chance and it would ultimately make very little difference to the patient.

At this point in time, our competitive edge in bridging gaps between unmet therapeutic needs and promising products is comparatively strong. The demand in the West for our medicines is driven first by the gap it addresses. Many Chinese companies are looking to penetrate into the Western market to meet this growing demand but are not yet equipped to do so -they still lack the understanding of Western markets and the operational capabilities. This will evolve over time as China is now promoting the use of TCM rigorously and its development into the West, this will take years though. We have demonstrated with Neuroaid our strengths in such aspects and we are confident the products we bring to market in future will share the same level of success.

What about versus Western companies? Well first of all, in China we're seen as a Chinese company because our founders, shareholders come from there. We have a competitive edge assessing products. If you look also at companies trying to do this outside of Greater China, like PHYNOVA in the UK, one would realize that because of more complex regulatory framework for clinical trials they are facing longer lead - times and cost. And I can imagine that - getting the importation license, even to make it a tea bag for patients is a huge process. Our unique positioning in China, our understanding of the West, and the fact that we are able to accelerate through Singapore give us a competitive edge.

For a company like us, where will we be in 3 -5 years, when the competition hits us? By then, we could be a 10, 20 or 50 products company with distributors in some countries and some marketing outfits in other countries. Or, we would be part of another group. If we are successful in what we want to do as a venture company, I think we would be a very good trade sell target for pharmaceutical companies or the functional food industry, once we have built our initial portfolio. And I think that's where I see us being part of a bigger engine - a discovery engine, marketing engine - 5 years down the road. We have to look at what makes most sense for what we want to achieve, and for the venture realization/venture interest for the founders of Moleac. We would look at options and if we see that being a part of a bigger company would do more, better and quicker, then we'd definitely look at it.

F&S: Could you share with us the business model you operate on? Do you have any companies that you benchmark yourselves against?

David: Our business model is that we acquire rights of products on which we pay our royalties or we share the upside of what we do in China, and then we develop them and bring to market in the rest of the world, making sure our partners, the inventor, get their fair share. When we sell we recognize that we're small and need an architecture of partnerships – maybe distributors whom we can manage and work closely with when they are geographically near us, or some of our shareholders. And maybe master agents or licensees when we are looking at more remote geographies. We invest for 12 - 36 months in one product, start hitting sales, grow the product and reinvest the money in more products. It is possible that we may extend to different types of medicines or we may extend the same model to different types of products – we could look at

molecules and develop them using our capabilities – the ability to implement clinical trials, to work in China with Western standards and quality and this could be the development of the company. I see us becoming a product company.

F&S: You have several partnerships with institutions – like the EDB (Economic Development Board) in Singapore. Could you please share with us the role of some of your key partnerships in driving growth for your company?

David: EDB has championed us and supported us and brought us to Singapore. They have helped us with some grants. We have not yet implemented research labs so we don't have research grants, but they're still a strong partner and champion and key asset to building anything here in Singapore. We've also received help from other government bodies in Singapore. We've received support for enterprise, help through our patent process. IE Singapore is also likely to help us with exports.

Shitian Pharmaceuticals in China manufactures Neuroaid. It is very likely in the future that we will manufacture at least part of Neuroaid in Singapore – they (Shitian Pharmaceuticals) would provide the active ingredient and we would package and brand it in Singapore.

Other partnerships: for Re: Vive – a smoking cessation device based on acupuncture principles that will be marketed very soon – it's the inventor and the Beijing University and other institutions which play the same role as Shitian Pharmaceuticals. Our Board of Founders, Scientific Advisory Board, investigators, our distributors, master agent for the Middle East – we have partnerships because we're small. We're not a virtual company, we're an orchestrator.

F&S: Neuroaid, the company's flagship product has already received market approval in two countries and is to be made available world-wide in 2007 -2008. Could you share with us the strategies in place to make a global availability happen?

David: The key to it is regulatory frameworks. We have here an understanding of how to go country by country in a specific framework. It's simpler for supplements than for drugs but it isn't very simple everywhere. In the U.S. the marketing strategy was working with industry associations to understand how to go there and prepare it, and now we are setting up marketing with partners. Europe is more complex – the regulation is similar to the U.S. but the fact base that you can leverage to show pre - existing use of the components of the product is much more difficult to access. North Asia is different. South Africa is very open – they are promoting the use of complementary medicine for access to wider choice and lower costs.

Because we are addressing an acute need in patients and their families, there is, therefore, demand and we receive enquiries about how to purchase Neuroaid around the world.

F&S: Could you tell us a little about Re:Vive and the role that is likely to play in Moleac's growth?

David: Re: Vive is similar and different. Similar in that it is a therapy that existed in China and which we thought had a new application in smoking cessation. We developed and re - developed and fine tuned it for smoking cessation. We are at the same time further ahead in clinical research with Re: Vive but not as quick to market. We've been able to conduct research in Singapore – quick, effective at the National University Hospital , the publication is on its way and will hopefully be accepted this month (May 2007). We are more ambitious and wanted to do something with a real consumer twist that would help sales take off. We've made it more stylish-looking, more playful, something you'd want to display.

F&S: How do you plan to sell this? Would it be through retail?

David: Sales channels would depend on countries. In many countries it would go through retail, in other countries as a medical device it would have to go through pharmacies. It would play head to head or in conjunction or in synergy with OTC products like patches and the range. In other countries it would go through para-pharmaceutical shops which can't sell the patches as they are licensed products. It's really a patchwork and is one of our challenges – to find the

regulatory and distribution frameworks there. But it's in our business model to give enough to our partners in China to get access to the right invention and the right dynamics, giving enough to the trade to make sure we get the right partners with the marketing knowledge down there.

F&S: What do you see as the market drivers that spurs growth for a company like Moleac? Let's talk about Neuroaid here.

David: Increasing strokes, more and more people surviving and therefore more frustration for families and no therapeutic (solutions) – so the driver here is patient demand. It is unfortunate that stroke has no effective therapeutics.

Challenges – when you have incredible patient appetite, you need to get the doctor's blessings to use NeuroAid and that is a challenge. Many of the doctors would say that it can be tried and others would say that they practice evidence based medicine and that there isn't enough evidence for this – both are acceptable viewpoints and eventually the patient has to decide what he/she wants.

F&S: Which geographies do you see as the most promising for Neuroaid?

David: I think the West. It's a more structured market – U.S. and Europe would be key. It's not so much about the population being more open minded, it's that the landscape of what they are offered is clearer, there is less confusion. If I were to talk to a Chinese doctor about Neuroaid he might want to add, say ginseng to it, because it's better for you, he makes more money on it etc. So, the closer we are to Chinese culture, the more chances of it not standing for what it is i.e. a TCM that is making its way to the West. It would be just another TCM product. In Asia, with traditional culture and more holistic and combination therapy, it's harder to get a clear cut way. Also, affordability is a factor here.

F&S: And what do you foresee for Re:Vive ? Do you see it being a pan-global product?

David: We certainly have this ambition! I think Asia is going to be big for Re: Vive. Smoking prevalence is high, smoking bans are coming in or have come in, appetites for gadgets are higher. We would be big in the West also, but maybe more for younger populations which are coming under pressure to stop smoking.

F&S: And finally, are there any other exciting products in the pipeline that the world can look forward to from Moleac?

David: We'd need another two interviews to talk about those! There are a few products about which I am very excited but have not yet reached the level of proof required. One of them would be a product for menopause – for years we've given estrogen but there have been side effects and many have stopped (taking it). Other drugs too have side effects. Then there was phyto – estrogen and it was thought that since phyto – estrogen can be sourced naturally. it should be good. But its still estrogen, the same molecular structure – it will likely stimulate the sexual organs in a similar way with the same safety issues in the long run.

We came across our product in a cancer hospital in China, where it was given to women going through hormonal therapy to reduce hot flashes. We checked it and found that it does not contain any estrogen or phyto – estrogen. We're quite excited about this one – if it takes away some of the menopause symptoms without creating risks, we'd be very happy.

There's a range of products we've looked at in dermatology as well, I don't have enough data points there. There's one for Vitiligo (white spots) that I'm quite excited about. And there's a range of functional foods for sleeping, relaxation – that's probably for 2010 – 2012.