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Ready to fly: Novo Informatics accelerates its marketing strategy

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Conventional drug discovery generally takes 12-15 years from the time molecule is discovered to its availability as a product for common masses. Since uncertainty of this process is very high, the task becomes even more difficult at the later stages. What makes things more complicated is the cost which is estimated to be $800 million to $1 billion for the whole process. This scenario gives rise to development of fast alternative approach which involves lesser time and money. Therefore, computer simulation has emerged as one of the finest solution to catalyze drug discovery.

Novo Informatics is one such company that is working on the computational biology tools to create innovative indigenous products. Set up in 2011, this startup incubated at the Indian Institute of Technology (IIT), Delhi, is all set to make its mark now. It provides a comprehensive portfolio of services that includes Target Modeling, v-HT molecule screening, Hits molecules identification, Hits to lead optimization and Molecule synthesis.

The investment of Rs 50 lakh from BIG scheme of BIRAC (Public company set up to fund innovation by government) in 2013, acted as a booster dose and it made good progress within a short span of time. It has since 2011, also worked with few clients to undertake development and validation of novel molecules.

"We have come a long way to establish ourselves. We dedicatedly focused on quality research and product development. This has helped us to achieve unique breakthroughs", says Mr Avinash Mishra, co founder and managing director who has been involved in the spearheading the product development at the company. Set to receive his phD degree shortly, Avinash has been the student of Dr B Jayaram, professor at chemistry department at IIT, Delhi and also the mentor and co-founder at Novo. Other co-founder Mr Sahil Kapoor and Mr Shashank Shekhar too have been involved in other activities such as global promotion and business development etc.

Setting an example how academic facilities could be used not just for paper publishing but real product output as well, the usage of Super Computer of SCFBio (Super Computing Facility for Bioinformatics & Computational Biology), of IIT Delhi has helped the startup with distinct advantage of high computing service for its research.

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Novo's R&D yielded significant outcome

Novo Informatics has developed a computational solution, Inventus which leverages scientist to conduct early stage drug discovery experiment on computer (in-silico) to cut down the chance of risk at the later stage. The product is scientifically reliable yet affordable.

Inventus has mainly 3 suites: biologics, small molecules discover and pharmacokinetics. The best part is that it features include dynamic pharmacokinetic study (run time simulation), 4 million compound library inbuilt and rapid virtual screening (1 Million compound in one minute). Costing around Rs 10-15 lakh per package, the cost for individual user is Rs 3.5 lakh. "The price, Avinash says, is still lesser than what is being offered for other softwares whith lesser features. It can go down in case there are bigger volumes."

The company has made available the free trial version of software at http://avish2k.wix.com/inventus Anybody can download it to try out the limited edition.

Constraints

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With only four members on board, Avinash admits that he had to curtail his staff because at the moment focus is more on marketing. The company has hired a specialist and freelancers too for spreading the information about its products. Communication is an important part of reach out strategy and understandably Novo Informatics is using all the tools. He in particular talks about a major but less talked about hurdle of travel expenses borne by startups to explore markets. "Here agencies must help out with a fund creation for startups eligible for genuine travel but may not be able to afford at that time. Of course it could be paid back on terms and conditions without interest," he added.

Towards financial empowerment

Novo Informatics is also set to open its office at Cambridge in London. This according to Avinash, has been possible due to the entrepreneur friendly environment in place there. While the company has made some revenue in last few years, it is being used to sustain operations. One more aspect that deserves appreciation, is that the company had invested back more that 60 percent of its revenue back into product development. While presently Avinash is highly focused on the business development aspect, he however, intends to expand team and start R&D again once the company gains substantial ground financially. The business model of realistic way of doing business having risk and yet not, is surely a unique one.

Easing drug discovery

"We are developing an innovative model that aims to address a today's challenge in combating widespread diseases and simultaneously which can cut down cost and time in delivering molecules to the market as faster pace," says Avinash while talking about the mission.
Company's goals are clear. It believes in developing novel technologies which can expedite the process of drug development for better healthcare.

"We are dedicated to research and development for generating of potential drug targets, against diseases that can make a difference in developing novel drugs at faster pace. We have accelerated our efforts towards strengthening our forte to ensure that we can face any challenges ahead," Avinash sums up.

Researchers vouch for it

The latest product, Inventus seems to be well received. It has been already run on the trials basis across India. Few of the testimonials from prominent institutes are:

Dr Dinesh Gupta Staff Research Scientist, ICGEB, New Delhi.
"I ran validation tests on Bioaffinity and Docking module (NovoDocker) of Novoinformatics software. Both modules were compared with respect to other freely available software and found to be quite comparable. The NovoDocker is quite a professional tool and solutions were found to be consistent in output."

Dr N Latha, coordinator, Bioinformatics facility, Sri Venkateswara College, Delhi University.
"The overall prediction accuracy for docking is acceptable and in accordance with experimental studies in case of targeted docking. The performance of the scoring functiuon in evaluating binding energies for protein-ligand complexes is comparable with existing commercial softwares."

Dr Hemanth Kumar, director, Patanjali Natural Coloroma, Haridwar.
I am happy to share my experience with the indigenously developed drug discovery software technology, Inventus. I sincerely congratulate the team for the genuine efforts in developing this technology. The software is user friendly and results are reliable and almost accurate matching with in vitro results. This software brings more technological advancements for the people who are working with drug discoveries and pharmaceutical technologies. Easy to adopt and accuracy of the results makes this software more precise for pharm and natural drug development."

You may also like this: Novo Informatics weaves magic of computational biology: http://www.biospectrumasia.com/biospectrum/influencers/3116/novo-informatics-weaves-magic-computational-biology