

Tranzyme Pharma: Lessons in Commercialization

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– Vipin Garg, president and CEO, Tranzyme Pharma

Over the last 28 years, Vipin Garg, president and CEO of Durham-based Tranzyme Pharma, has helped to start five companies in the biotech and pharmaceutical arena. Last year, he won the Ernst & Young Entrepreneur Of The Year® award in the health sciences category for the Carolinas Region. David Drutz, Tranzyme co-founder and chairman of the board, is not only an entrepreneur but a physician, scientist, CEO and venture capitalist. Together, they’ve directed the growth of Tranzyme Pharma past formidable obstacles to evolve from a gene therapy to a clinical stage biopharmaceutical company.

Their lead products, both in late-stage clinical trials, are focused on the treatment of gastrointestinal (GI) disorders. Both drug candidates modulate the ghrelin receptor which regulates GI motility, appetite and energy balance. TZP-101, an intravenous ghrelin agonist, is entering Phase III clinical trials for the treatment of acute gastric motility disorders such as severe gastroparesis and post-operative ileus (POI). TZP-102, an oral drug, is currently in a multinational Phase II trial for treatment of chronic gastrointestinal disorders. TZP-201, a motilin antagonist for treating diarrhea, and TZP-301, a ghrelin antagonist for the treatment of metabolic diseases, are also in the Tranzyme pipeline.

FROM TOOLS TO DRUGS

Tranzyme started with a base technology that Drutz said, used “certain types of viruses for delivery, including gene therapy.” He discovered the technology in the late 1990s at the University of Alabama Birmingham in his early years as a partner with Pacific Rim Ventures Co. Ltd, which is now a fully invested global, life science fund.

Garg, who joined Tranzyme in 2000, recalled the “buzz” about the human genome project and its potential to accelerate drug discovery. “That really didn’t pan out because biology is much more complex,” he commented. “Nonetheless, we started the company on the premise that there would be need for building biological assays for drug discovery. We quickly realized we’d have to reinvent ourselves.”


They also had to produce revenue. Drutz credits Garg for his success finding pharmaceutical partners that used the technology to modify cells to express proteins that the companies were interested in studying. Pharma companies

soon started mastering the technology themselves, and Drutz and Garg decided on a new direction.

“We were very good at delivering genes to all kind of cells; that’s biology. We didn’t have what you need if you’re going to make a drug. We didn’t have any chemistry,” Drutz said. “So we needed to find a partner that had chemistry but didn’t have any biology.”

In 2003, they merged with Neokimia of Quebec, Canada. Neokimia’s medicinal chemistry platform which aimed at G-protein coupled receptors (GPCRs) and other cell-surface receptors expressed in the gastrointestinal tract and neurosensory systems, corresponded to Tranzyme’s biological platform and provided the basis for TZP 101 and TZP 102. Neokimia also introduced the company’s proprietary MATCH™ or Macrocyclic Template Chemistry technology. Tranzyme recently announced a multimillion dollar strategic partnership with Bristol Myers Squibb for the use of MATCH™ to identify and develop new drug targets.

Tranzyme’s basic research remains in Canada where the company receives tax credits from the provincial Quebec and Canadian governments. “That helped us, especially in our early years where we were getting as much as 35 percent credit for every dollar we spent on research and development,” Garg said. “The merger created quite a winning combination. We refocused our strategy on novel targets and novel drugs. Our first major financing in May 2005 was \$32 million. Today, basically all of our value comes from the technology that we acquired in 2003.”

“That round of investment,” Drutz added, “plus that of the early birds, allowed us to take the Neokimia chemistry and really advance it to the point we’re making real drugs.” 



Tranzyme Pharma President and CEO Vipin Garg (left) and Co-founder and Chairman of the Board David Drutz (right).



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