



Altor pinpoints treatments to the target

BY ALLAN MAURER

Cancer drugs frequently make people sick and cause hair loss and other side effects because the powerful treatments affect normal cells as well as the tumors they're intended to attack.

South Florida-based Altor Biotechnology is testing a technology that helps target drugs directly to a tumor or virus, reducing side effects and increasing the treatment's effectiveness.

Hing C. Wong formed Altor in 2002 as a spin-off from Sunol Molecular Corp., which seeded the company with \$4 million. Top fund Sanderling Ventures led the firm's B round of \$6 million. Because its technology was in development for years before the company was formed, is much further along than a startup.

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It's a novel approach with considerable promise to increase the effectiveness of current treatments. It offers hope for extending the lives and the quality of life for people suffering from a number of cancers.

One of the reasons the AIDs virus is so difficult to beat is that it mutates easily and many variations occur during infection.

"It evades the immune system based on those little

variations," explains Peter Rhode, Altor VP of Research and Development.

"That's its hallmark, the ability to mutate quickly." Those variations also lead to drug resistance, a problem for nearly all AIDs patients over time. "No drug today eradicates those infected cells," he says.

The Altor technology is very effective at seeking out and eliminating the infected cells despite the changes. "Our goal is to wipe out the reservoir of the infected cells in patients already on drug therapies," says Rhode.

Altor has three products in clinical-stage and several others in research and preclinical development.

Its lead product, STAR-Ck or ALT-801, an anti-cancer drug, is nearing completion of Phase I clinical trial.

ALT-801 is composed of IL-2 genetically fused to a soluble T-cell receptor (TCR) directed against a p53-derived tumor-associated antigen. About half of all cancers overexpress the p53 antigen, which leads to the transformation of normal cells into cancer cells and their growth.

Current antibody technologies cannot recognize the p53 antigen, but Altor's can.

Altor's approach uses the TCR to guide IL-2 bioactivity to the tumor site, where the cytokine-stimulated immune system attacks the cancerous cells.

Altor has found in preclinical testing that tumor-targeted delivery of IL-2 resulted in better efficacy and less toxicity than was observed with standard IL-2 treatment. Altor's preclinical studies on ALT-801 were funded by various grants from the National Institutes of Health.

The company's second clinical-stage product, a monoclonal antibody which prevents and treats staphylococcal infections in premature neonates, has been licensed to Biosynexus/GlaxoSmithKline. This product has completed Phase IIa clinical trials and is expected to soon begin later-stage trials. The company believes the total U.S. market opportunity for all of Altor's products and indications is more than \$20 billion.

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